TOSHIBA

FILE NO. 023-200222

SERVICE MANUAL

COLOR TELEVISION

N2PSP Chassis

50HDX82, 57HDX82

(TAC0273) (TAC0274)

– SUMMARY –

50HDX82, 57HDX82 are the same as 65HDX82 except for the parts tabled on back of this sheet. Use this service manual together with the service manual of 65HDX82 (File No. 020-200218).

PUBLISHED IN JAPAN, Aug., 2002 So

REPLACEMENT PARTS LIST DIFFERENCES

Location No.	Part No.	Description
A001	23411548	Wood Cabinet (50HDX82)
A001	23411713	Wood Cabinet (57HDX82)
A102	23527179	Speaker Grille (50HDX82)
A102	23527193	Speaker Grille (57HDX82)
A175	23929314	Bezel Clip
A201	23540542	Bezel (50HDX82)
A201	23540677	Bezel (57HDX82)
A424	23540544	Back Board (50HDX82)
A424	23540679	Back Board (57HDX82)
A501	23728011	Screw
A701	23064539	Carton (50HDX82)
A701	23064866	Carton (57HDX82)
A703	23946194	Packing, Top (50HDX82)
A703	23946191	Packing, Top (57HDX82)
A708	23946189	Packing, Bottom (50HDX82)
A708	23946190	Packing, Bottom (57HDX82)
H001	23321447	Tuner, EL977LW
K501	23311957	Lenti Sheet, SCREEN50KM-L (50HDX82)
K501	23311955	Lenti Sheet, SCREEN57DM-L (57HDX82)
K502	23311958	Fresnel Sheet, SCREEN50KM-F (50HDX82)
K502	23311956	Fresnel Sheet, SCREEN57DM-F (57HDX82)
K503	23311858	Screen Protector, SCR-PRO50WAL (50HDX82)
K503	23311857	Screen Protector, SCR-PRO57AL (57HDX82)
K601	23405012	MIRROR50WL (50HDX82)
K601	23405028	Mirror (57HDX82)
✻ U901	23787889	SIGNAL/CONV Board, PD0639L (50HDX82)
✻ U901	23787890	SIGNAL/CONV Board, PD0639M (57HDX82)
✻ UH01	23787644	DIGI-CONV Board, PD0638C (50HDX82)
✻ UH01	23787711	DIGI-CONV Board, PD0638E (57HDX82)
⚠V901R	23086799	Protector Coupling R (50HDX82)
⚠V901R	23086411	Protector Coupling R (57HDX82)
⚠V902G	23086800	Protector Coupling G (50HDX82)
⚠V903B	23086801	Protector Coupling B (50HDX82)
⚠V903B	23086412	Protector Coupling B (57HDX82)

SCHEMATIC DIAGRAM

MODEL : 65HDX82

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

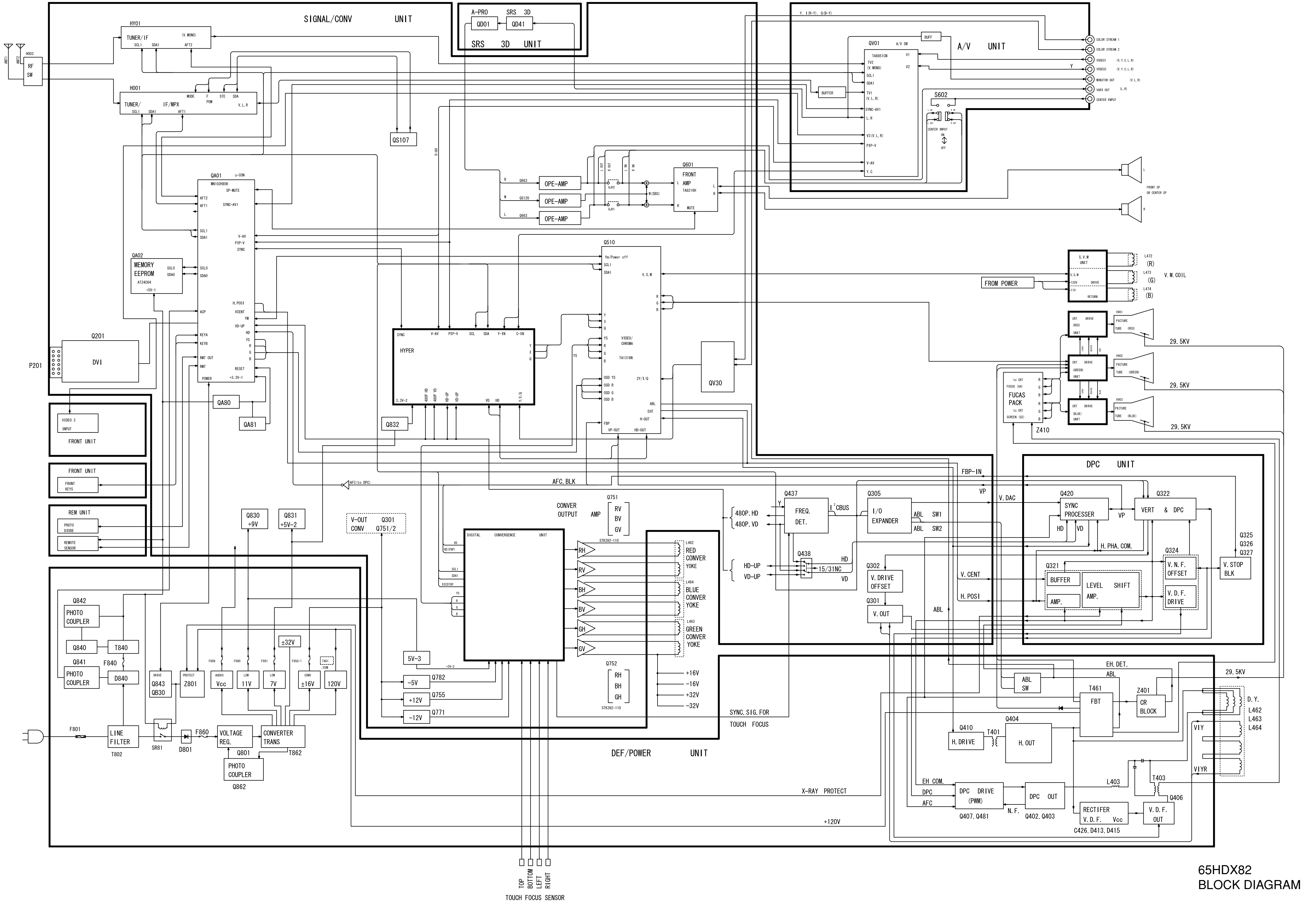
NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt
   1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt
   10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
   —+||— Electolytic capacitor —Ⓜ||— Mylar capacitor
3. The parts indicated with " ⚠ " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 120 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

■ SCHEMATIC DIAGRAM STRUCTURE:

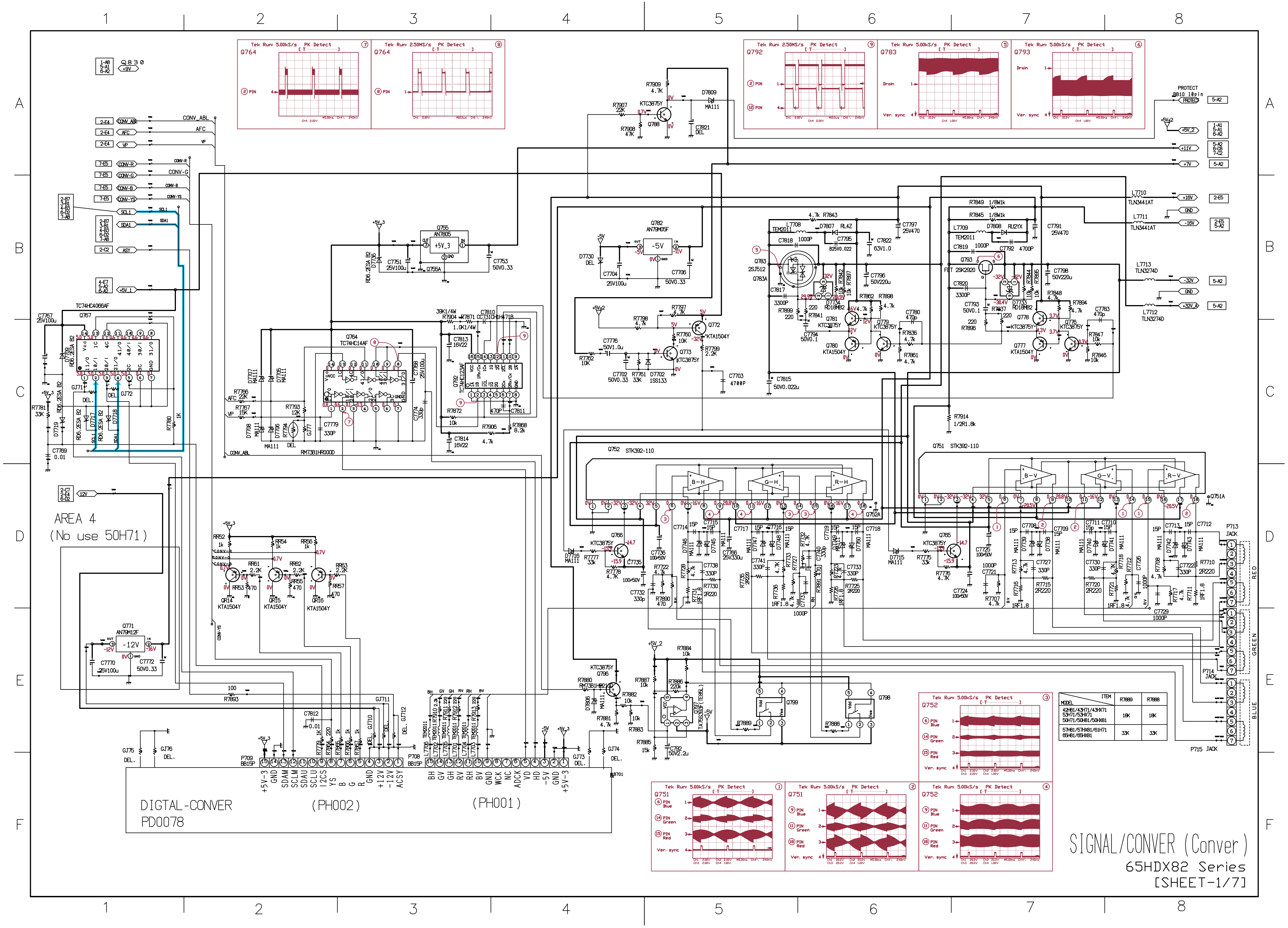
- SIGNAL / CONVER Circuit
  - (Conver) [SHEET - 1/7] 1/19
  - (Defrection) [SHEET - 2/7] 2/19
  - (If) [SHEET - 3/7] 3/19
  - (Maicon) [SHEET - 4/7] 4/19
  - (Power) [SHEET - 5/7] 5/19
  - (Audio) [SHEET - 6/7] 6/19
  - (Video) [SHEET - 7/7] 7/19
- POWER / DEF Circuit
  - (Power) [SHEET - 1/2] 8/19
  - (Defrection) [SHEET - 2/2] 9/19
- DPC Circuit 10/19
- DIGITAL CONVER Circuit
  - (1/2) [SHEET - 1/2] 11/19
  - (2/2) [SHEET - 2/2] 12/19
- AV / REM Circuit
  - (1/2) [SHEET - 1/2] 13/19
  - (2/2) [SHEET - 2/2] 14/19
- FRONT / T. FOCUS-SENSOR Circuit 15/19
- SRS-WOW Circuit 16/19
- CRT / SVM Circuit
  - (CRT) [SHEET - 1/2] 17/19
  - (SVM) [SHEET - 2/2] 18/19
- DVI Circuit 19/19

CIRCUIT BLOCK DIAGRAM



SIGNAL/CONV UNIT
SRS 3D UNIT
A-PRO
SRS 3D
QD01
QD41
A/V UNIT
HY01
TUNER/IF
H001
TUNER/ IF/MPX
H003
RF SW
ANT1
ANT2
QS107
QA01
µ-CON
MN102H85K
QA02
MEMORY EEPROM
AT24C64
Q201
DVI
P201
QA80
QA81
HYPER
Q832
Q510
VIDEO/ CHROMA
TA1316N
QV30
Q601
FRONT AMP
TA8216H
OPE-AMP
QV01
TA8851CN
A/V SW
BUFF
BUFFER
S602
COLOR STREAM 1
COLOR STREAM 2
VIDEO1
VIDEO2
MONITOR OUT
VAR1 OUT
CENTER INPUT
FRONT SP OR CENTER SP
FROM POWER
S.V.M UNIT
L472 (R)
L473 (G)
L474 (B)
V.M.COIL
CRT DRIVE UNIT
PICTURE TUBE
V901
V902
V903
29.5KV
FUCAS PACK
Z410
VIDEO 3 INPUT
FRONT UNIT
FRONT KEYS
REM UNIT
PHOTO DIODE
REMOTE SENSOR
Q830 +9V
Q831 +5V-2
V-OUT Q301
CONV Q751/2
AFC(to DPC)
AFC.BLK
CONVER OUTPUT AMP
Q751
RV
BV
GV
DIGITAL CONVERGENCE UNIT
RH
RV
BH
BV
GH
GV
STK392-110
L462 RED CONVER YOKE
L464 BLUE CONVER YOKE
L463 GREEN CONVER YOKE
Q752
RH
BH
GH
+16V
-16V
+32V
-32V
5V-3
-5V Q782
+12V Q755
-12V Q771
Q842 PHOTO COUPLER
Q840
T840
Q841 PHOTO COUPLER
F840
D840
Q843 QB30
Z801
Vcc
11V
7V
±16V
120V
±32V
F801
LINE FILTER
T802
SR81
D801
F860
VOLTAGE REG.
Q801
CONVERTER TRANS
T862
PHOTO COUPLER
Q862
DEF/POWER UNIT
TOP
BOTTOM
LEFT
RIGHT
TOUCH FOCUS SENSOR
SYNC.SIG.FOR TOUCH FOCUS
X-RAY PROTECT
+120V
FBP-IN
VP
V.DAC
Q437
FREQ. DET.
I²CBUS
Q305
I/O EXPANDER
ABL SW1
ABL SW2
480P.HD
480P.VD
Q438
15/31NC
HD
VD
HD-UP
VD-UP
Q302
V.DRIVE OFFSET
Q301
V.OUT
V.CENT
H.POSI
ABL
DPC UNIT
Q420
SYNC PROCESSER
Q322
VERT & DPC
H.PHA.COM.
Q321
BUFFER
AMP.
LEVEL SHIFT AMP.
Q324
V.N.F. OFFSET
V.D.F. DRIVE
V.STOP BLK
Q325
Q326
Q327
EH.DET.
ABL SW
T461
FBT
Z401
CR BLOCK
D.Y.
L462
L463
L464
VIY
VIYR
Q410
H.DRIVE
T401
Q404
H.OUT
EH COM.
DPC
AFC
DPC DRIVE (PWM)
Q407,Q481
DPC OUT
N.F.
Q402,Q403
L403
T403
Q406
RECTIFER V.D.F. Vcc
V.D.F. OUT
C426,D413,D415

65HDX82
BLOCK DIAGRAM



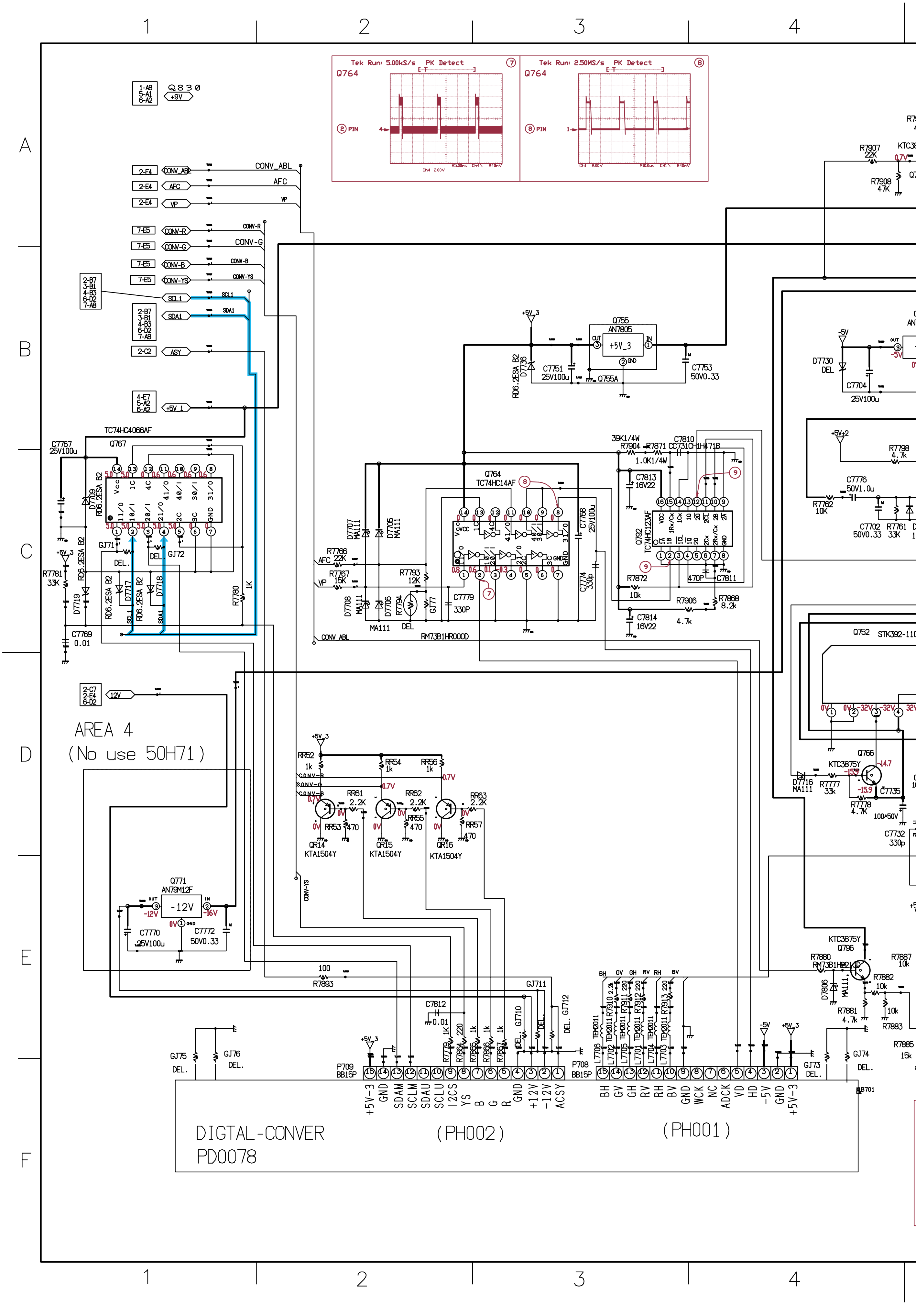
AREA 4
(No use 50H71)
Q752 STK392-110
Q751 STK392-110
Q782 AN79M05F
Q755 AN7805
Q771 AN79M12F
Q764 TC74HC14AF
Q767 TC74HC4066AF
Q792 TC74HC123AF
Q783 2SJ512
Q793 2SK2920
PROTECT
BB10 10pin
DIGTAL-CONVER
PD0078
(PH002)
(PH001)
P713 JACK
P714 JACK
P715 JACK
RED
GREEN
BLUE

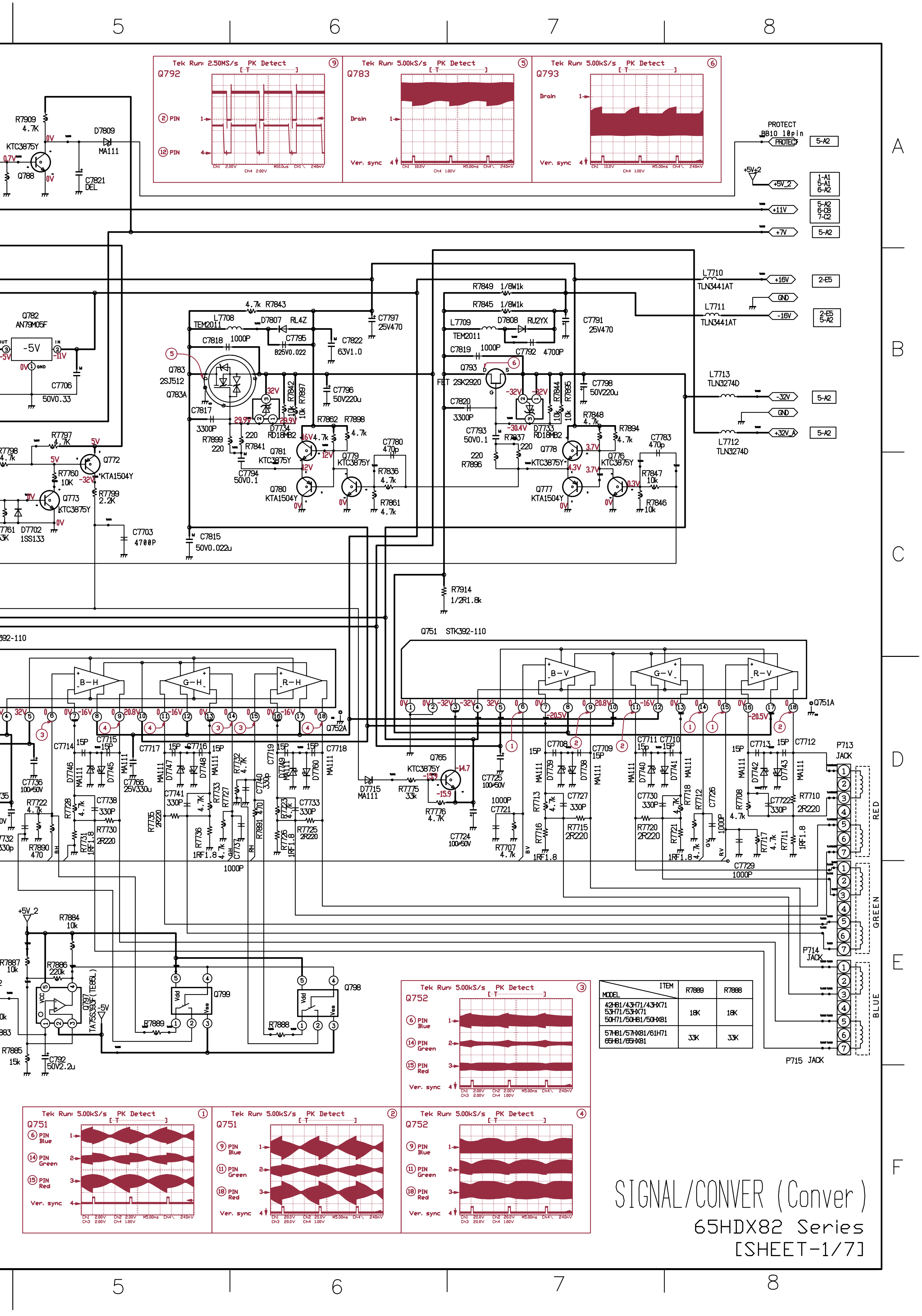
MODEL \ ITEM	R7889	R7888
42H81/43H71/43HX71 53H71/53HX71 50H71/50H81/50HX81	18K	18K
57H81/57HX81/61H71 65H81/65HX81	33K	33K

SIGNAL/CONVER (Conver)

65HDX82 Series

[SHEET-1/7]


1
2
3
4
A
B
C
D
E
F
Tek Run: 5.00kS/s PK Detect
Q764
⑦
② PIN
Tek Run: 2.50MS/s PK Detect
Q764
⑧
⑧ PIN
Q830
+9V
CONV_ABL
AFC
VP
CONV-R
CONV-G
CONV-B
CONV-YS
SCL1
SDA1
ASY
+5V_1
Q755
AN7805
+5V_3
C7751 25V100u
C7753 50V0.33
Q755A
RD6.2ESA B2 D7736
D7730 DEL
C7704 25V100u
TC74HC4066AF
Q767
C7767 25V100u
RD6.2ESA B2 D7709
GJ71
DEL.
GJ72
R7781 33K
D7719
C7769 0.01
D7717
D7718
R7780 1K
Q764
TC74HC14AF
D7707 MA111
D7705 MA111
R7766 22K
R7767 15K
R7793 12K
D7708 MA111
D7706 MA111
R7794 DEL
GJ77
C7779 330P
C7768 25V100u
C7774 330p
RM73B1HR000D
39K1/4W
R7904
R7871
1.0K1/4W
C7810 CC731CH1H471B
C7813 16V22
Q792
TC74HC123AF
R7872 10k
R7906 4.7k
R7868 8.2k
C7814 16V22
470P C7811
R7907 22K
R7908 47K
KTC3
+5V_2
R7798 4.7k
C7776 50V1.0u
R7762 10K
C7702 50V0.33
R7761 33K
Q752 STK392-110
12V
AREA 4
(No use 50H71)
RR52 1k
RR54 1k
RR56 1k
RR61 2.2K
RR62 2.2K
RR63 2.2K
RR53 470
RR55 470
RR57 470
QR14 KTA1504Y
QR15 KTA1504Y
QR16 KTA1504Y
Q771
AN79M12F
-12V
C7770 25V100u
C7772 50V0.33
100 R7893
C7812 0.01
GJ711
GJ712
GJ710
D7716 MA111
Q766
KTC3875Y
R7777 33k
R7778 4.7K
C7735
C7732 330p
KTC3875Y
Q796
R7880 RM73B1H221J
R7887 10k
R7882 10k
R7881 4.7k
R7883 10k
R7885 15k
D7806
GJ75 DEL.
GJ76 DEL.
GJ73 DEL.
GJ74 DEL.
P709 BB15P
P708 BB15P
+5V-3
GND
SDAM
SCLM
SDAU
SCLU
I2CS
YS
B
G
R
GND
+12V
-12V
ACSY
BH
GV
GH
RV
RH
BV
GND
WCK
NC
ADCK
VD
HD
-5V
GND
+5V-3
DIGTAL-CONVER
PD0078
(PH002)
(PH001)

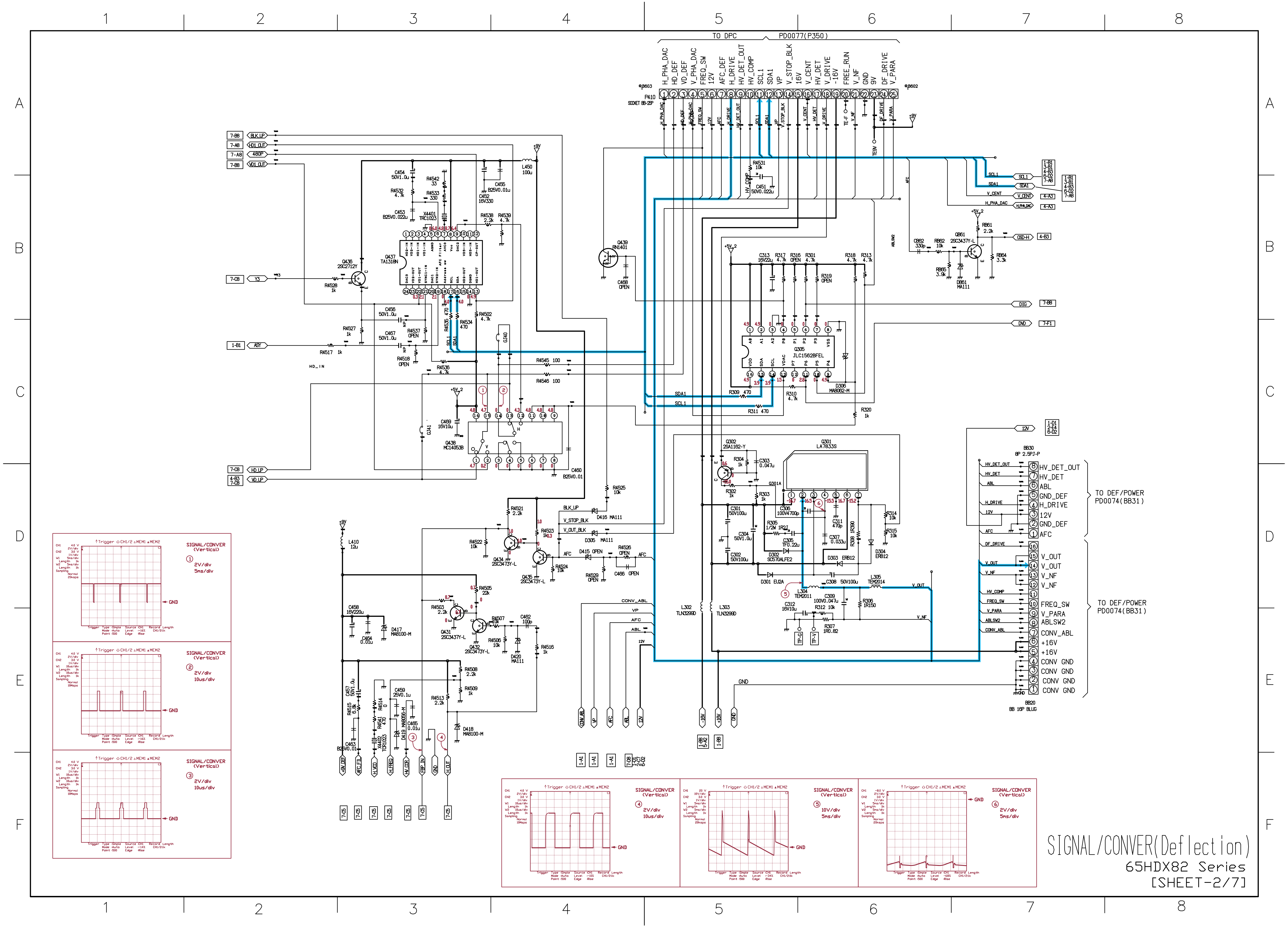

5
6
7
8
A
B
C
D
E
F
Tek Run: 2.50MS/s PK Detect
Q792
⑨
② PIN
⑫ PIN
Tek Run: 5.00kS/s PK Detect
Q783
⑤
Drain
Ver. sync
Tek Run: 5.00kS/s PK Detect
Q793
⑥
Drain
Ver. sync
R7909
4.7K
KTC3875Y
Q788
D7809
MA111
C7821
DEL
PROTECT
BB10 10pin
PROTECT
5-A2
+5V_2
+5V_2
1-A1
5-A1
6-A2
+11V
5-A2
6-C8
7-C2
+7V
5-A2
Q782
AN79M05F
-5V
C7706
50V0.33
L7710
TLN3441AT
+16V
2-E5
GND
L7711
TLN3441AT
-16V
2-E5
5-A2
R7849 1/8W1k
R7845 1/8W1k
4.7k R7843
L7708
TEM2011
D7807
RL4Z
C7795
B25V0.022
C7797
25V470
C7822
63V1.0
C7818 1000P
Q783
2SJ512
Q783A
C7817
3300P
R7899
220
R7841
220
D7734
RD18MB2
R7842
10k
R7897
10k
C7796
50V220u
R7862
R7898
4.7k
Q781
KTC3875Y
Q779
KTC3875Y
C7780
470p
R7836
4.7k
Q780
KTA1504Y
R7861
4.7k
C7794
50V0.1
C7815
50V0.022u
L7709
TEM2011
D7808
RU2YX
C7819 1000P
C7792 4700P
C7791
25V470
Q793
FET 2SK2920
C7820
3300P
C7793
50V0.1
R7837
220
R7896
D7733
RD18MB2
R7844
10k
R7895
10k
C7798
50V220u
R7848
4.7k
R7894
4.7k
Q778
KTC3875Y
Q776
KTC3875Y
C7783
470p
R7847
10k
Q777
KTA1504Y
R7846
10k
L7713
TLN3274D
-32V
5-A2
GND
+32V_A
5-A2
L7712
TLN3274D
R7797
4.7K
R7798
4.7k
Q772
KTA1504Y
R7760
10K
R7799
2.2K
Q773
KTC3875Y
D7702
1SS133
C7703
4700P
R7914
1/2R1.8k
Q751 STK392-110
B-H
G-H
R-H
B-V
G-V
R-V
Q752A
Q751A
C7714
C7715
C7717
C7716
C7718
C7719
D7746
D7745
D7747
D7748
D7749
D7750
MA111
C7736
100/50V
C7766
25V330u
C7741
330P
C7738
330P
C7733
330P
R7722
4.7k
R7728
4.7k
R7731
1RF1.8
R7730
2R220
R7733
R7727
R7732
4.7K
R7735
2R220
R7736
1RF1.8
R7891
470
R7723
4.7k
R7726
1RF1.8
R7725
2R220
C7740
330p
C7737
1000P
R7890
470
BH
GH
RH
D7715
MA111
R7775
33k
Q765
KTC3875Y
R7776
4.7K
C7725
100/50V
C7724
100/50V
C7721
1000P
R7707
4.7k
C7708
C7709
15P
D7739
D7738
R7713
4.7k
R7716
1RF1.8
C7727
330P
R7715
2R220
BV
C7711
C7710
D7740
D7741
C7730
330P
R7718
4.7K
R7712
R7720
2R220
R7721
1RF1.8
C7726
1000P
GV
RV
C7729
1000P
C7713
C7712
D7742
D7743
R7708
4.7k
C7722
330P
R7710
2R220
R7717
4.7k
R7711
1RF1.8
P713
JACK
RED
GREEN
P714
JACK
BLUE
P715 JACK
+5V_2
R7884
10k
R7887
10k
R7886
220k
Q797
TA75S393F(TE85L)
-5V
R7885
15k
C792
50V2.2u
R7889
Q799
Vdd
Vss
R7888
Q798
Tek Run: 5.00kS/s PK Detect
Q752
③
⑥ PIN Blue
⑭ PIN Green
⑮ PIN Red
Ver. sync
Tek Run: 5.00kS/s PK Detect
Q751
①
⑥ PIN Blue
⑭ PIN Green
⑮ PIN Red
Ver. sync
Tek Run: 5.00kS/s PK Detect
Q751
②
⑨ PIN Blue
⑪ PIN Green
⑱ PIN Red
Ver. sync
Tek Run: 5.00kS/s PK Detect
Q752
④
⑨ PIN Blue
⑪ PIN Green
⑱ PIN Red
Ver. sync

MODEL \ ITEM	R7889	R7888
42H81/43H71/43HX71 53H71/53HX71 50H71/50H81/50HX81	18K	18K
57H81/57HX81/61H71 65H81/65HX81	33K	33K

SIGNAL/CONVER (Conver)

65HDX82 Series

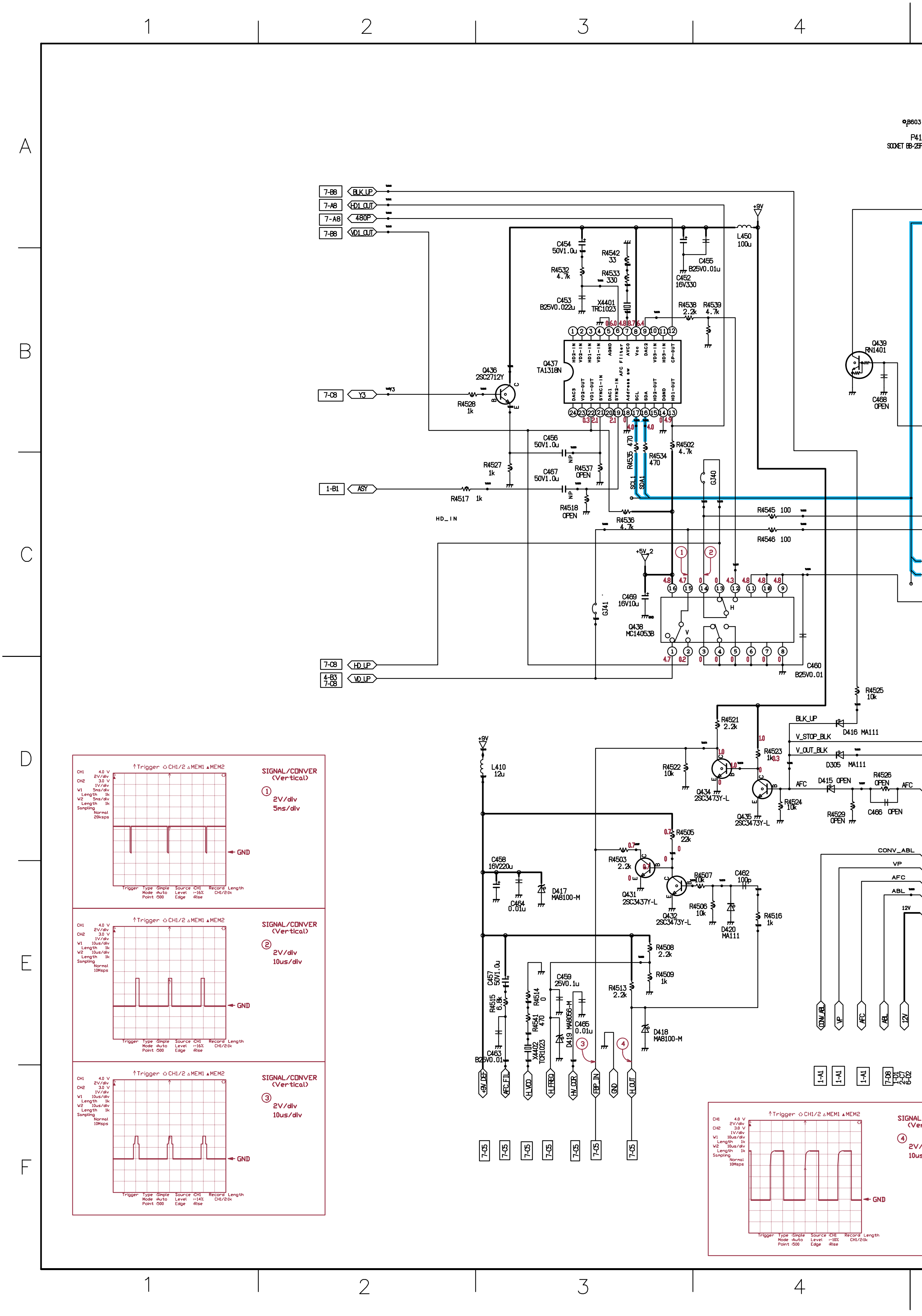
[SHEET-1/7]

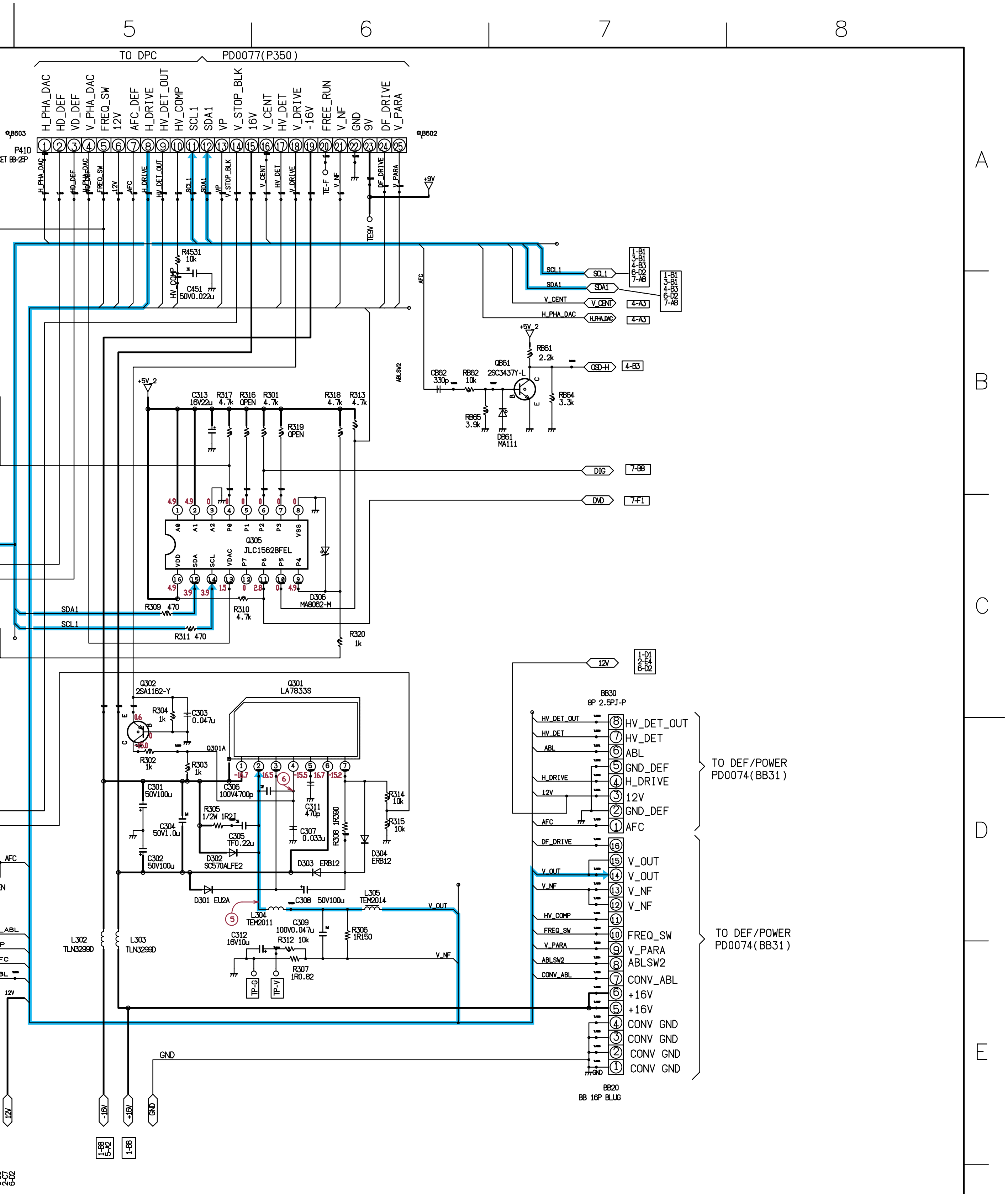

TO DPC
PD0077(P350)
H_PHA_DAC
HD_DEF
VD_DEF
V_PHA_DAC
FREQ_SW
12V
AFC_DEF
H_DRIVE
HV_DET_OUT
HV_COMP
SCL1
SDA1
VP
V_STOP_BLK
16V
V_CENT
HV_DET
V_DRIVE
-16V
FREE_RUN
V_NF
GND
9V
DF_DRIVE
V_PARA
P410 SOCKET BB-25P
BLK_UP
HD1_OUT
480P
VD1_OUT
Y3
ASY
HD_UP
VD_UP
Q437 TA1318N
Q436 2SC2712Y
Q439 RN1401
Q438 MC14053B
Q305 JLC1562BFEL
Q302 2SA1162-Y
Q301 LA7833S
Q861 2SC3437Y-L
Q434 2SC3437Y-L
Q435 2SC3437Y-L
Q431 2SC3437Y-L
Q432 2SC3437Y-L
X4401 TRC1023
X4402 TCR1023
L450 100u
L410 12u
L302 TLN3299D
L303 TLN3299D
L304 TEM2011
L305 TEM2014
DIG
DVD
OSD-H
BB30 8P 2.5PJ-P
HV_DET_OUT
HV_DET
ABL
GND_DEF
H_DRIVE
12V
GND_DEF
AFC
TO DEF/POWER PD0074(BB31)
V_OUT
V_OUT
V_NF
V_NF
FREQ_SW
V_PARA
ABLSW2
CONV_ABL
+16V
+16V
CONV GND
CONV GND
CONV GND
CONV GND
TO DEF/POWER PD0074(BB31)
BB20 BB 16P BLUG
CONV_ABL
VP
AFC
ABL
12V
-16V
+16V
GND
SIGNAL/CONVER (Vertical)
① 2V/div 5ms/div
② 2V/div 10us/div
③ 2V/div 10us/div
④ 2V/div 10us/div
⑤ 10V/div 5ms/div
⑥ 2V/div 5ms/div
GND

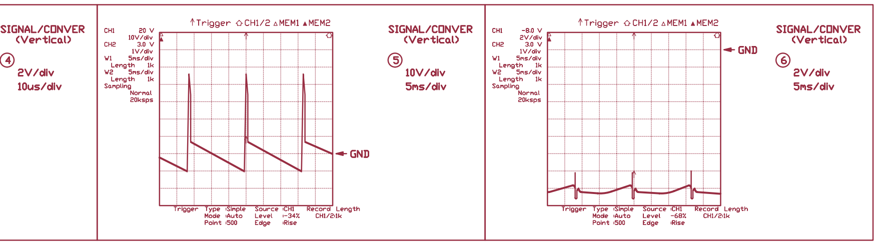
SIGNAL/CONVER(Deflection)

65HDX82 Series

[SHEET-2/7]


1
2
3
4
A
B
C
D
E
F
B603
P41
SOCKET BB-2F
7-B8
BLK UP
7-A8
HD1 OUT
7-A8
480P
7-B8
VD1 OUT
+9V
L450
100u
C454
50V1.0u
R4542
33
R4532
4.7k
R4533
330
C455
B25V0.01u
C452
16V330
C453
B25V0.022u
X4401
TRC1023
R4538
2.2k
R4539
4.7k
Q437
TA1318N
HD2-IN
VD2-IN
HD1-IN
VD1-IN
AGND
AFC Filter
AVCO
Vcc
DAC2
VD3-IN
HD3-IN
CP-OUT
DAC3
VD2-OUT
VD1-OUT
SYNC1-IN
DAC1
SYNC2-IN
Address sw
SCL
SDA
HD2-OUT
DGND
HD1-OUT
Q436
2SC2712Y
Q439
RN1401
C468
OPEN
7-C8
Y3
R4528
1k
R4535
470
R4534
470
R4502
4.7k
C456
50V1.0u
R4527
1k
C467
50V1.0u
R4537
OPEN
SCL1
SDA1
GJ40
1-B1
ASY
R4517 1k
R4518
OPEN
R4545 100
R4536
4.7k
R4546 100
HD_IN
+5V_2
C469
16V10u
GJ41
Q438
MC14053B
H
V
C460
B25V0.01
7-C8
HD UP
4-B3
7-C8
VD UP
R4525
10k
R4521
2.2k
BLK_UP
D416 MA111
V_STOP_BLK
V_OUT_BLK
D305 MA111
R4523
1k
R4522
10k
Q434
2SC3473Y-L
Q435
2SC3473Y-L
R4524
10k
AFC
D415 OPEN
R4526
OPEN
R4529
OPEN
C466 OPEN
+9V
L410
12u
R4505
22k
R4503
2.2k
Q431
2SC3437Y-L
R4507
10k
C462
100p
R4506
10k
Q432
2SC3473Y-L
D420
MA111
R4516
1k
C458
16V220u
C464
0.01u
D417
MA8100-M
CONV_ABL
VP
AFC
ABL
12V
R4508
2.2k
R4509
1k
R4513
2.2k
D418
MA8100-M
C457
50V1.0u
R4515
6.8k
R4514
0
C459
25V0.1u
R4541
470
X4402
TCR1023
D419 MA8056-M
C465
0.01u
C463
B25V0.01
+9V DEF
AFC FIL
H VCO
H FREQ
HV COR
FBP IN
GND
H OUT
7-C5
1-A1
7-D8
1-D1
2-C7
6-D2
SIGNAL/CONVER
(Vertical)
① 2V/div 5ms/div
② 2V/div 10us/div
③ 2V/div 10us/div
④ 2V/ 10us
GND
Trigger CH1/2 MEM1 MEM2
CH1 4.0 V 2V/div
CH2 3.0 V 1V/div
W1 5ms/div Length 1k
W2 5ms/div Length 1k
Sampling Normal 20ksps
W1 10us/div
W2 10us/div
Sampling Normal 10Msps
Trigger Type Simple Mode Auto Point 500
Source CH1 Level -16% Edge Rise
Record Length CH1/2:1k

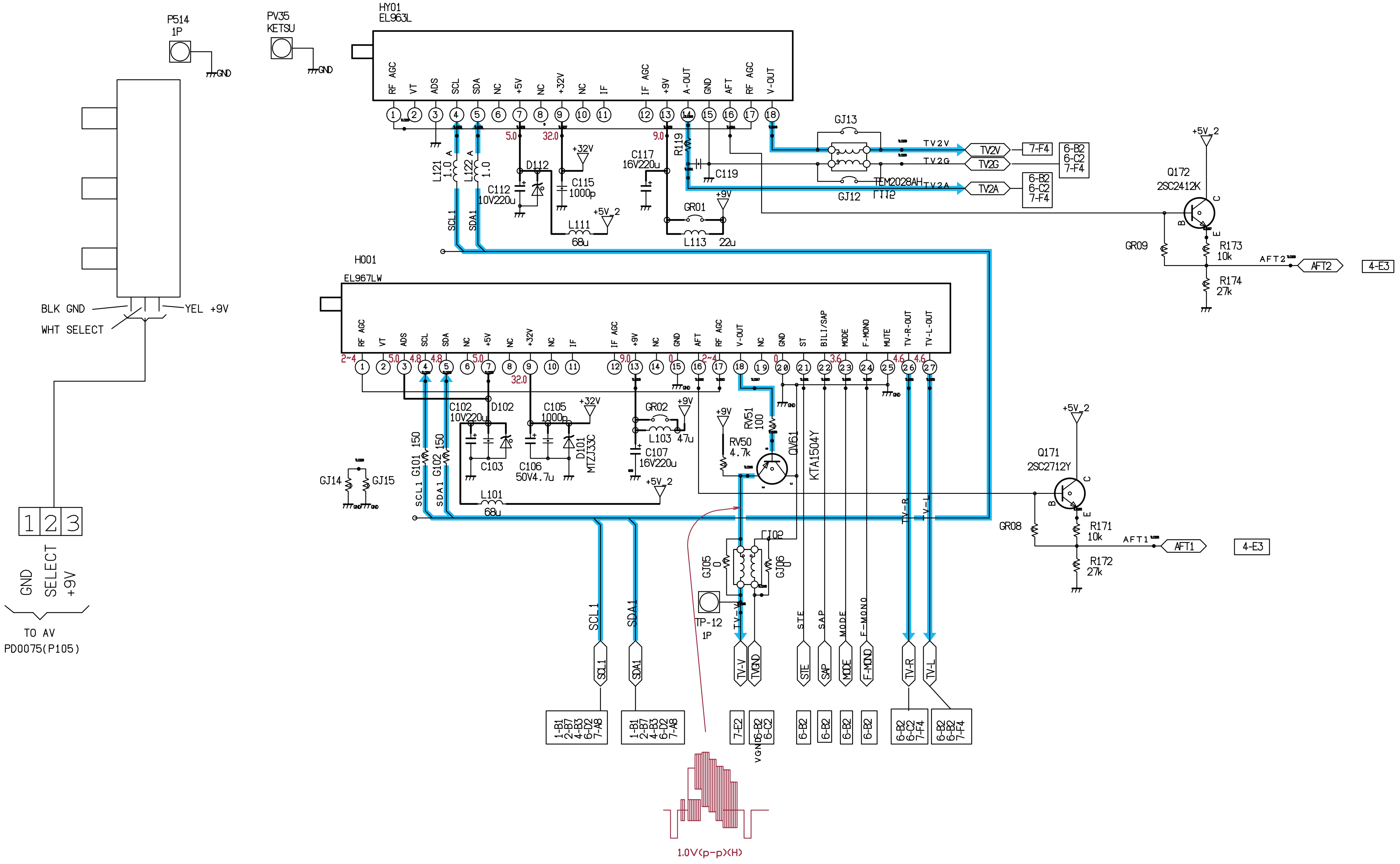

5
6
7
8
A
B
C
D
E
F
TO DPC
PD0077(P350)
H_PHA_DAC
HD_DEF
VD_DEF
V_PHA_DAC
FREQ_SW
12V
AFC_DEF
H_DRIVE
HV_DET_OUT
HV_COMP
SCL1
SDA1
VP
V_STOP_BLK
16V
V_CENT
HV_DET
V_DRIVE
-16V
FREE_RUN
V_NF
GND
9V
DF_DRIVE
V_PARA
P410
B603
B602
+9V
TE-F
TE9V
R4531 10k
C451 50V0.022u
HV_COMP
AFC
SCL1
SDA1
V_CENT
H_PHA_DAC
1-B1 3-B1 4-B3 6-D2 7-A8
4-A3
+5V_2
RB61 2.2k
QB61 2SC3437Y-L
OSD-H
4-B3
CB62 330p
RB62 10k
RB64 3.3k
RB65 3.9k
DB61 MA111
ABLSW2
C313 16V22u
R317 4.7k
R316 OPEN
R301 4.7k
R318 4.7k
R313 4.7k
R319 OPEN
DIG
7-B8
DVD
7-F1
Q305
JLC1562BFEL
A0 A1 A2 P0 P1 P2 P3 VSS
VDD SDA SCL VDAC P7 P6 P5 P4
D306 MA8062-M
R309 470
R311 470
R310 4.7k
R320 1k
12V
1-D1 2-E4 6-D2
Q302 2SA1162-Y
R304 1k
C303 0.047u
Q301 LA7833S
Q301A
R302 1k
R303 1k
C301 50V100u
C306 100V4700p
C311 470p
R314 10k
R315 10k
C304 50V1.0u
R305 1/2W 1R2J
C305 TF0.22u
C307 0.033u
R308 1R390
C302 50V100u
D302 SC570ALFE2
D303 ERB12
D304 ERB12
D301 EU2A
L304 TEM2011
C308 50V100u
L305 TEM2014
V_OUT
C309 100V0.047u
R306 1R150
C312 16V10u
R312 10k
R307 1R0.82
V_NF
TP-G
TP-V
L302 TLN3299D
L303 TLN3299D
BB30
8P 2.5PJ-P
HV_DET_OUT
HV_DET
ABL
GND_DEF
H_DRIVE
12V
GND_DEF
AFC
TO DEF/POWER PD0074(BB31)
DF_DRIVE
V_OUT
V_OUT
V_NF
V_NF
HV_COMP
FREQ_SW
V_PARA
ABLSW2
CONV_ABL
+16V
+16V
CONV GND
CONV GND
CONV GND
CONV GND
TO DEF/POWER PD0074(BB31)
BB20
BB 16P BLUG
GND
12V
-16V
+16V
GND
1-B8 5-A2
1-B8



SIGNAL/CONVER(Deflection)

65HDX82 Series

[SHEET-2/7]

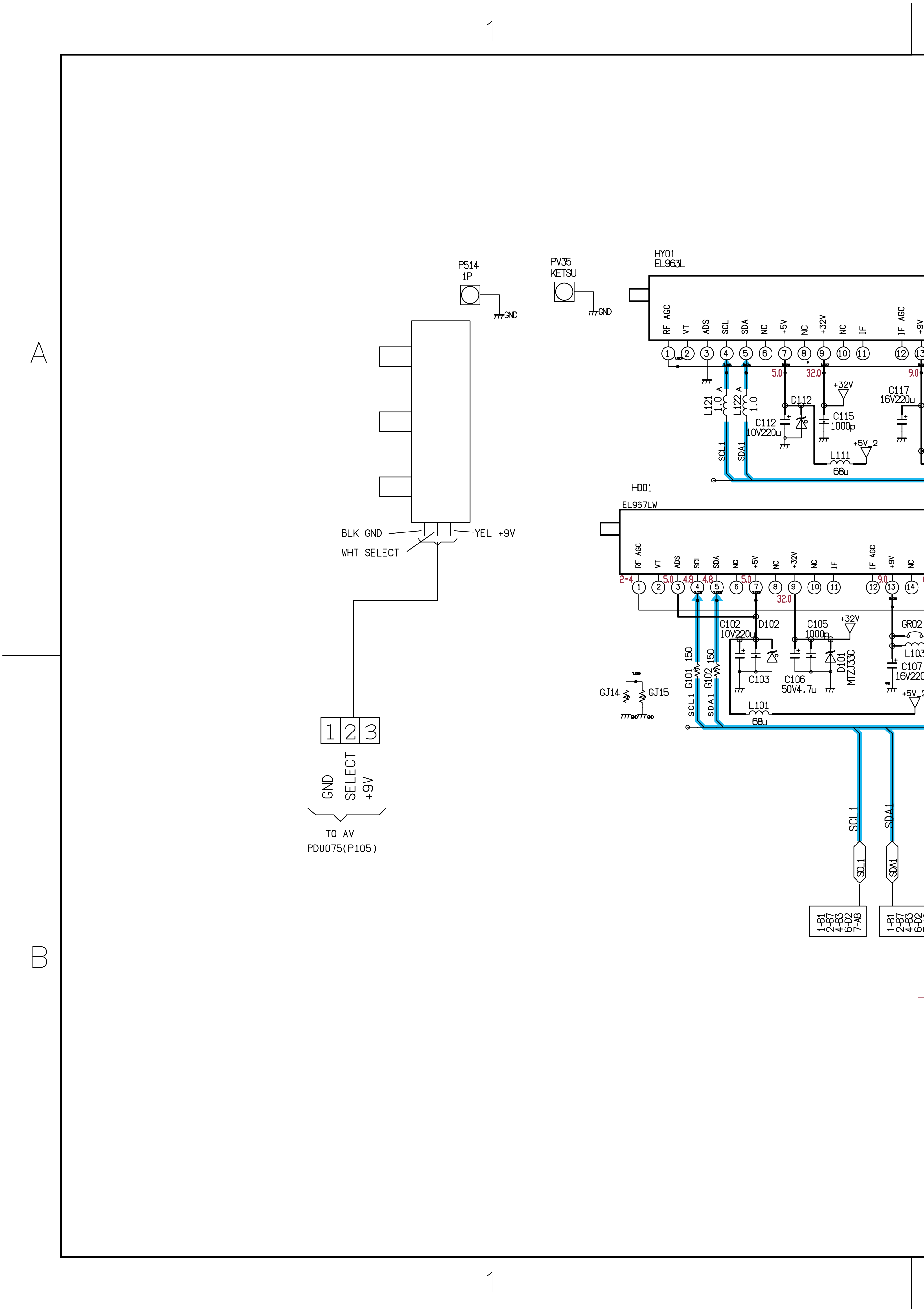


P514
1P
PV35
KETSU
GND
HY01
EL963L
RF AGC
VT
ADS
SCL
SDA
NC
+5V
+32V
IF
IF AGC
+9V
A-OUT
GND
AFT
V-OUT
5.0
32.0
9.0
L121 1.0
L122 1.0
C112 10V220u
D112
C115 1000p
L111 68u
C117 16V220u
R119
C119
GR01
L113 22u
GJ13
GJ12
TEM2028AH
TV2V
TV2G
TV2A
7-F4
6-B2
6-C2
Q172
2SC2412K
+5V_2
GR09
R173 10k
R174 27k
AFT2
4-E3
H001
EL967LW
BILI/SAP
MODE
F-MONO
MUTE
TV-R-OUT
TV-L-OUT
ST
2~4
4.8
3.6
4.6
C102 10V220u
D102
C105 1000p
C106 50V4.7u
D101 MTZJ33C
GR02
L103 47u
C107 16V220u
C103
L101 68u
G101 150
G102 150
GJ14
GJ15
RV50 4.7k
RV51 100
QV61
KTA1504Y
Q171
2SC2712Y
GR08
R171 10k
R172 27k
AFT1
CI102
GJ05 0
GJ06 0
TP-12
1P
SCL1
SDA1
TV-V
TVGND
STE
SAP
MODE
F-MONO
TV-R
TV-L
1-B1
2-B7
4-B3
6-D2
7-A8
7-E2
6-B2
6-C2
VGND
7-F4
1.0V(p-p)(H)
BLK GND
WHT SELECT
YEL +9V
1 2 3
GND
SELECT
+9V
TO AV
PD0075(P105)

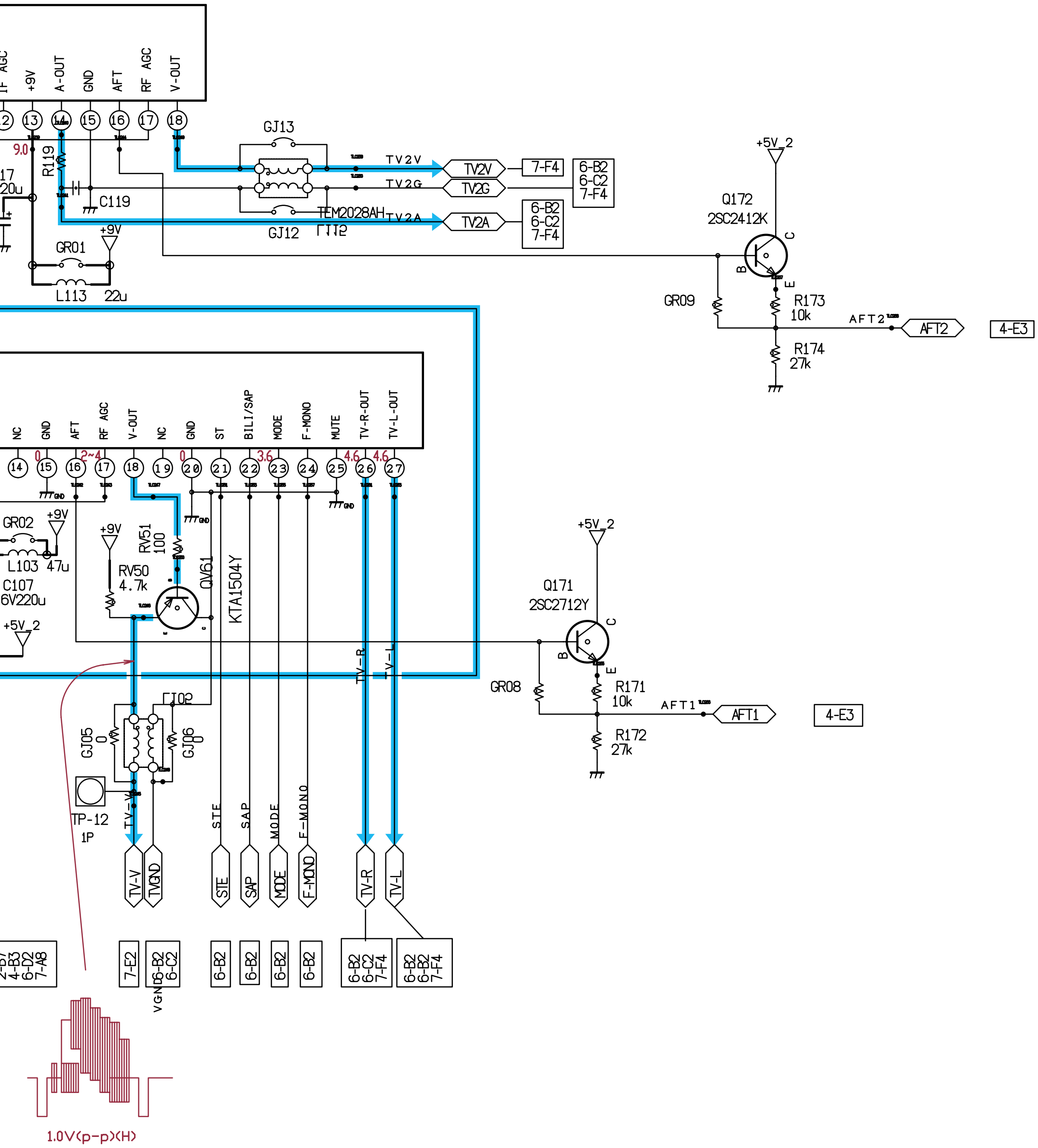
SIGNAL/CONVER(If)

65HDX82 Series

[SHEET-3/7]


1
A
B
P514
1P
GND
PV35
KETSU
GND
HY01
EL963L
RF AGC
VT
ADS
SCL
SDA
NC
+5V
NC
+32V
NC
IF
IF AGC
+9V
1
2
3
4
5
6
7
8
9
10
11
12
5.0
32.0
9.0
L121
1.0 A
L122
A
1.0
D112
+32V
C117
16V220u
C112
10V220u
C115
1000p
+5V_2
L111
68u
SCL1
SDA1
H001
EL967LW
RF AGC
VT
ADS
SCL
SDA
NC
+5V
NC
+32V
NC
IF
IF AGC
+9V
NC
2~4
5.0
4.8
4.8
5.0
9.0
32.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
BLK GND
YEL +9V
WHT SELECT
C102
10V220u
D102
C105
1000p
+32V
GR02
L103
G101 150
G102 150
C103
C106
50V4.7u
D101
MTZJ33C
C107
16V220
+5V_2
GJ14
GJ15
GND
GND
SCL1
SDA1
L101
68u
1
2
3
GND
SELECT
+9V
TO AV
PD0075(P105)
SCL1
SDA1
SCL1
SDA1
1-B1
2-B7
4-B3
6-D2
7-A8
1-B1
2-B7
4-B3
6-D2

A

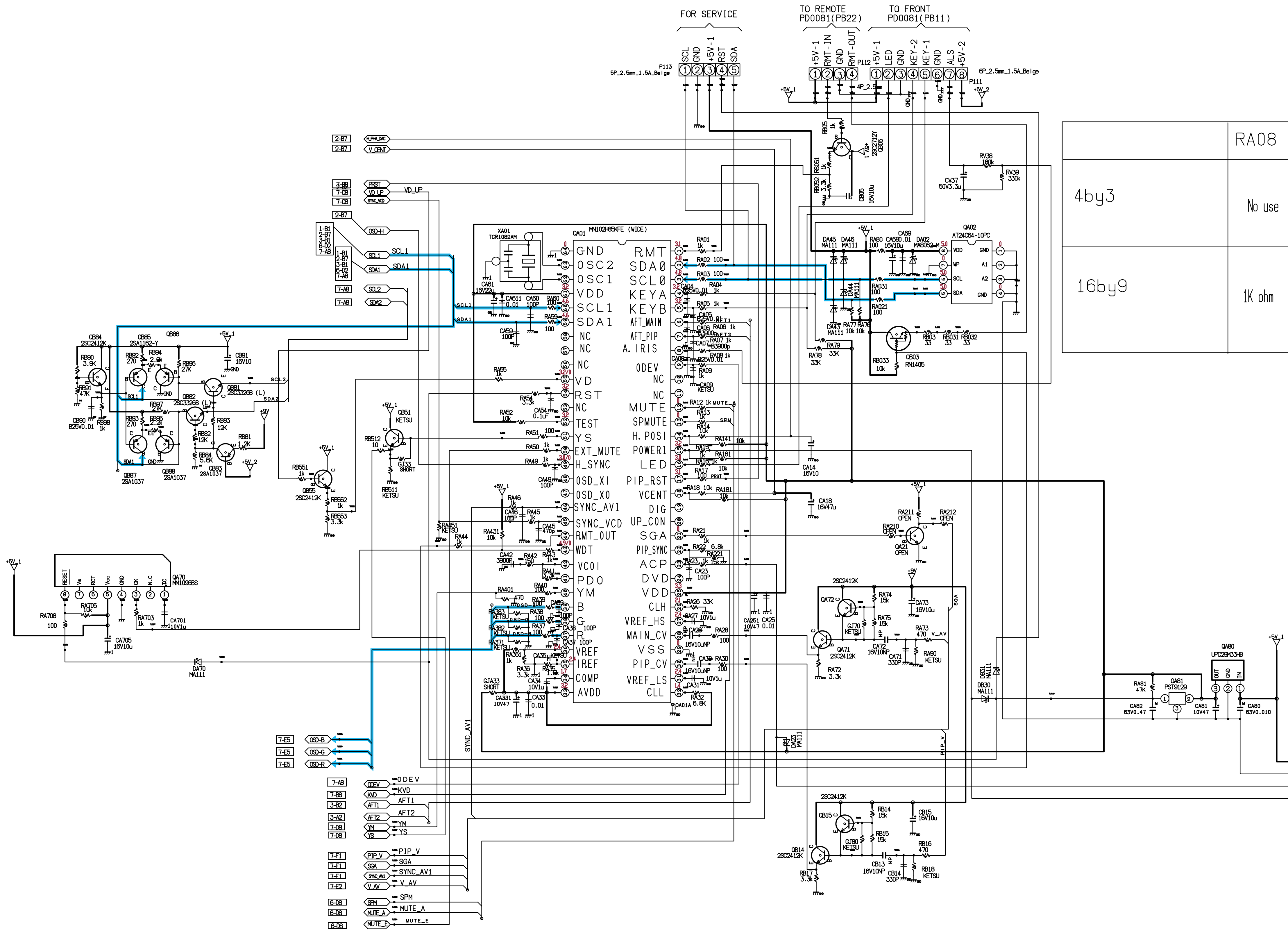

IF AGC
+9V
A-OUT
GND
AFT
RF AGC
V-OUT
12
13
14
15
16
17
18
9.0
R119
17
20u
C119
+9V
GR01
L113 22u
GJ13
TEM2028AH
GJ12
TV2V
TV2G
TV2A
7-F4
6-B2
6-C2
7-F4
6-B2
6-C2
7-F4
+5V_2
Q172
2SC2412K
C
B
E
GR09
R173
10k
R174
27k
AFT2
4-E3
NC
GND
AFT
RF AGC
V-OUT
NC
GND
ST
BILI/SAP
MODE
F-MONO
MUTE
TV-R-OUT
TV-L-OUT
0
2~4
0
3.6
4.6
4.6
14
15
16
17
18
19
20
21
22
23
24
25
26
27
GR02
+9V
L103 47u
C107
6V220u
+5V_2
+9V
RV51
100
RV50
4.7k
QV61
KTA1504Y
LI02
GJ05
0
GJ06
0
TP-12
1P
TV-V
TV-R
TV-L
STE
SAP
MODE
F-MONO
TV-V
TVGND
STE
SAP
MODE
F-MONO
TV-R
TV-L
2-B7
4-B3
6-D2
7-A8
7-E2
6-B2
6-C2
VGND
6-B2
6-B2
6-B2
6-B2
6-B2
6-C2
7-F4
6-B2
6-B2
7-F4
+5V_2
Q171
2SC2712Y
C
B
E
GR08
R171
10k
R172
27k
AFT1
4-E3
1.0V(p-p)(H)

B

SIGNAL/CONVER(If)

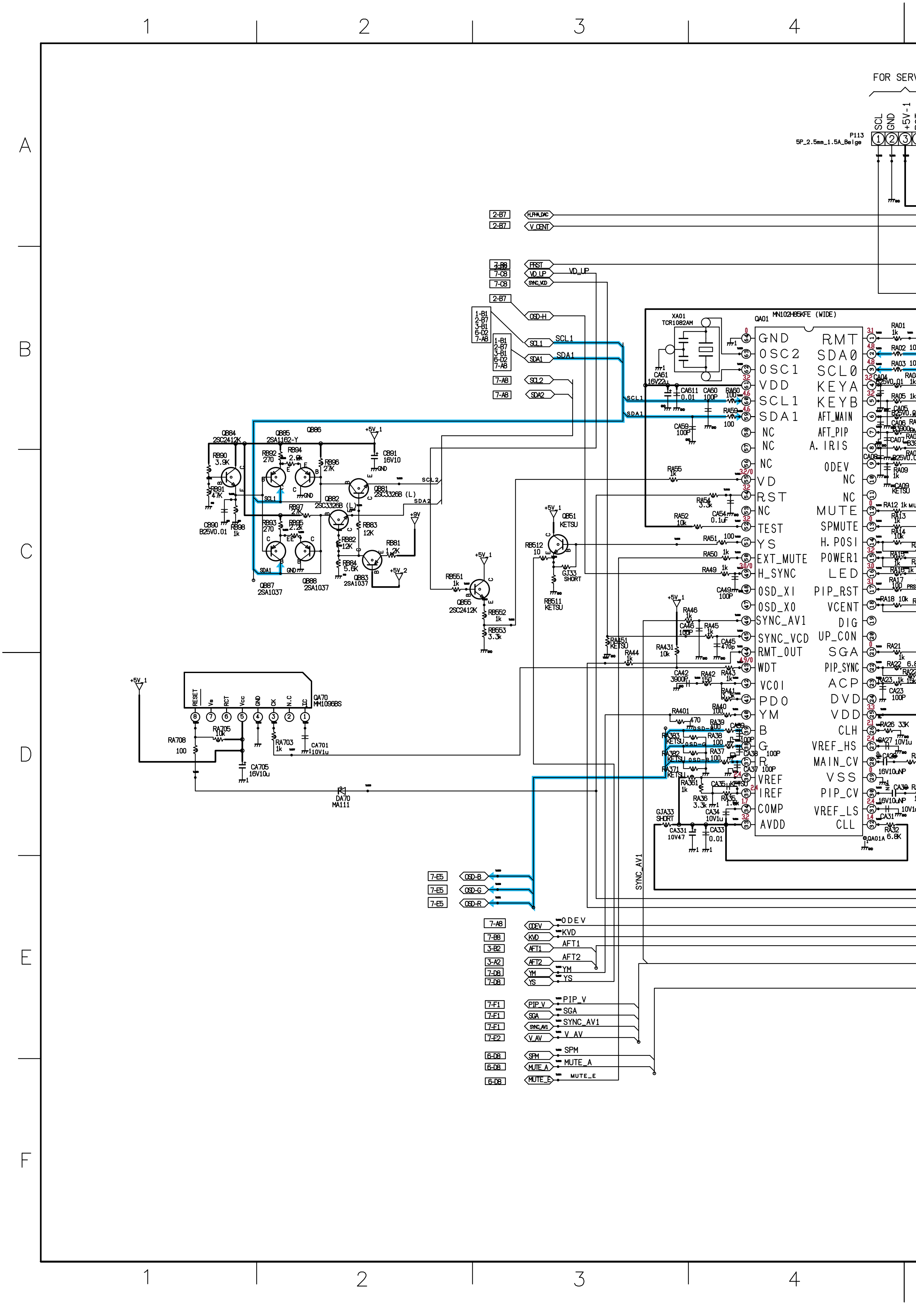
65HDX82 Series

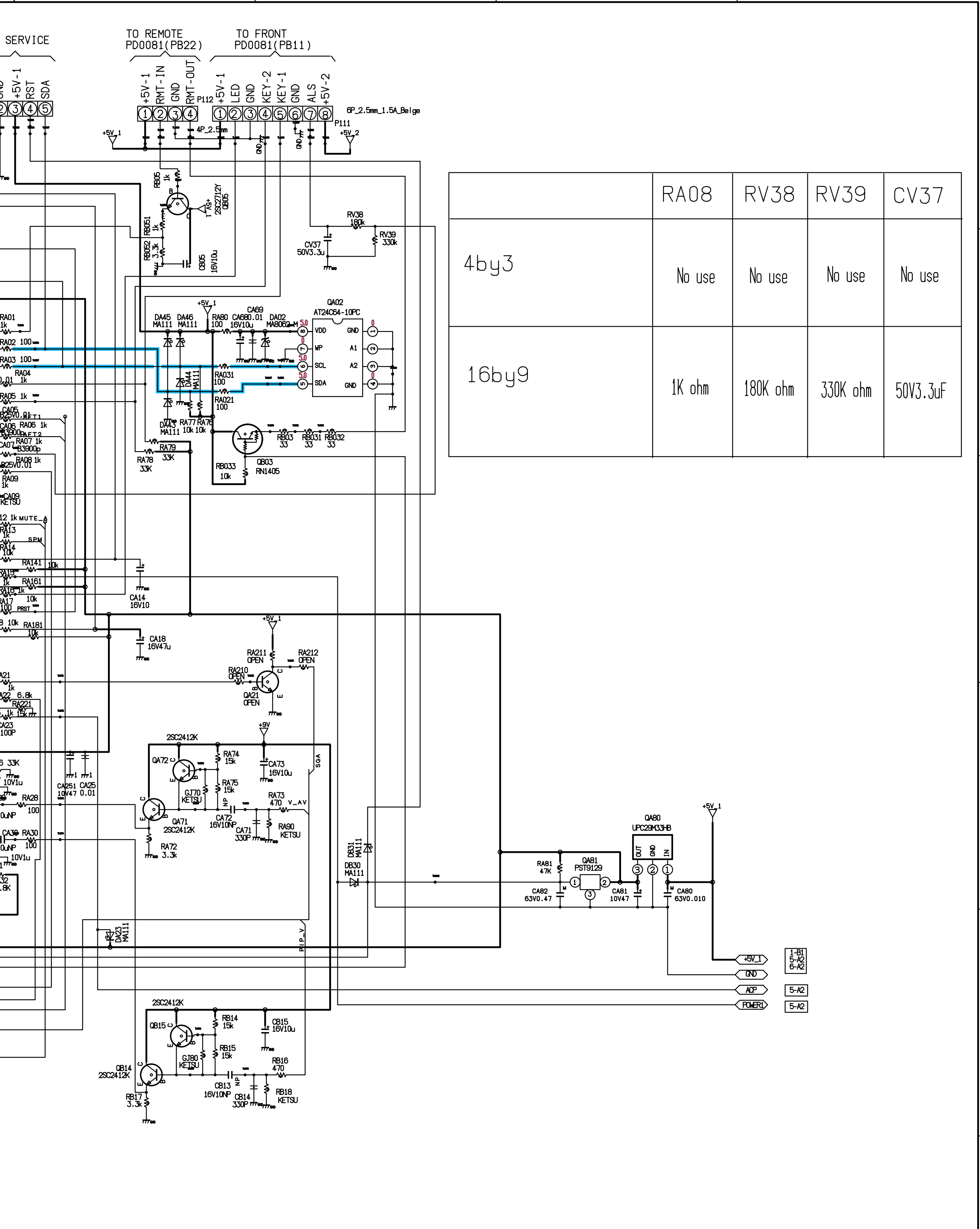
[SHEET-3/7]


FOR SERVICE
TO REMOTE
PD0081(PB22)
TO FRONT
PD0081(PB11)
SCL
GND
+5V-1
RST
SDA
P113
5P_2.5mm_1.5A_Beige
+5V-1
RMT-IN
GND
RMT-OUT
P112
4P_2.5mm
LED
KEY-2
KEY-1
ALS
+5V-2
P111
8P_2.5mm_1.5A_Beige
QA01
MN102H56KFE (WIDE)
XA01
TCR1082AM
GND
OSC2
OSC1
VDD
SCL1
SDA1
NC
VD
RST
TEST
YS
EXT_MUTE
H_SYNC
OSD_XI
OSD_XO
SYNC_AV1
SYNC_VCD
RMT_OUT
WDT
VC01
PD0
YM
B
G
R
VREF
IREF
COMP
AVDD
RMT
SDA0
SCL0
KEYA
KEYB
AFT_MAIN
AFT_PIP
A. IRIS
ODEV
MUTE
SPMUTE
H. POSI
POWER1
LED
PIP_RST
VCENT
DIG
UP_CON
SGA
PIP_SYNC
ACP
DVD
VDD
CLH
VREF_HS
MAIN_CV
VSS
PIP_CV
VREF_LS
CLL
QA02
AT24C64-10PC
A1
A2
WP
QA70
MN1096BS
RESET
QA80
UPC29M33HB
QA81
PST9129
QB84
2SC2412K
QB85
2SA1162-Y
QB81
2SC3326B (L)
QB82
2SC3326B (L)
QB87
2SA1037
QB88
2SA1037
QB83
2SA1037
QB55
2SC2412K
QB51
KETSU
QB05
2SC2712Y
QB03
RN1405
QA21
OPEN
QA72
2SC2412K
QA71
2SC2412K
QB15
2SC2412K
QB14
2SC2412K
DA70
MA111
DB30
MA111
DB31
MA111
GJ33
SHORT
GJA33
SHORT
SYNC_AV1
PIP_V
V_AV
SGA
2-B7
7-C8
7-A8
1-B1
7-E5
OSD-B
OSD-G
OSD-R
ODEV
KVD
AFT1
AFT2
YM
YS
PIP_V
SGA
SYNC_AV1
V_AV
SPM
MUTE_A
MUTE_E
RST
VD_UP
OSD-H
SCL1
SDA1
SCL2
SDA2
+5V_1
GND
ACP
POWER1
5-A2

	RA08	RV38	RV39	CV37
4by3	No use	No use	No use	No use
16by9	1K ohm	180K ohm	330K ohm	50V3.3uF

SIGNAL/CONVER(Maicon)
65HDX82 Series
[SHEET-4/7]


1
2
3
4
A
B
C
D
E
F
FOR SERV
P113
5P_2.5mm_1.5A_Beige
SCL
GND
+5V-1
2-B7
ALPHA_DAC
V_CENT
7-B8
PRST
VD_UP
7-C8
SYNC_VCD
OSD-H
SCL1
SDA1
SCL2
SDA2
1-B1
2-B7
3-B1
6-D2
7-A8
QA01
MN102H85KFE (WIDE)
XA01
TCR1082AM
GND
OSC2
OSC1
VDD
SCL1
SDA1
NC
VD
RST
TEST
YS
EXT_MUTE
H_SYNC
OSD_XI
OSD_XO
SYNC_AV1
SYNC_VCD
RMT_OUT
WDT
VCOI
PDO
YM
B
G
R
VREF
IREF
COMP
AVDD
RMT
SDA0
SCL0
KEYA
KEYB
AFT_MAIN
AFT_PIP
A. IRIS
ODEV
MUTE
SPMUTE
H. POSI
POWER1
LED
PIP_RST
VCENT
DIG
UP_CON
SGA
PIP_SYNC
ACP
DVD
VDD
CLH
VREF_HS
MAIN_CV
VSS
PIP_CV
VREF_LS
CLL
QB84
2SC2412K
QB85
2SA1162-Y
QB86
QB81
2SC3326B (L)
QB82
2SC3326B (L)
QB83
2SA1037
QB87
2SA1037
QB88
2SA1037
QB51
KETSU
QB55
2SC2412K
+5V_1
+5V_2
+9V
CB91
16V10
CB90
B25V0.01
QA70
MM1096BS
RESET
Vs
RCT
Vcc
GND
CK
N.C
CO
RA705
10k
RA708
100
RA703
1k
CA701
10V1u
CA705
16V10u
DA70
MA111
7-E5
OSD-B
OSD-G
OSD-R
7-A8
ODEV
7-B8
KVD
3-B2
AFT1
3-A2
AFT2
7-D8
YM
YS
7-F1
PIP_V
SGA
SYNC_AV1
7-F2
V_AV
6-D8
SPM
MUTE_A
MUTE_E
GJ33
SHORT
GJA33
SHORT

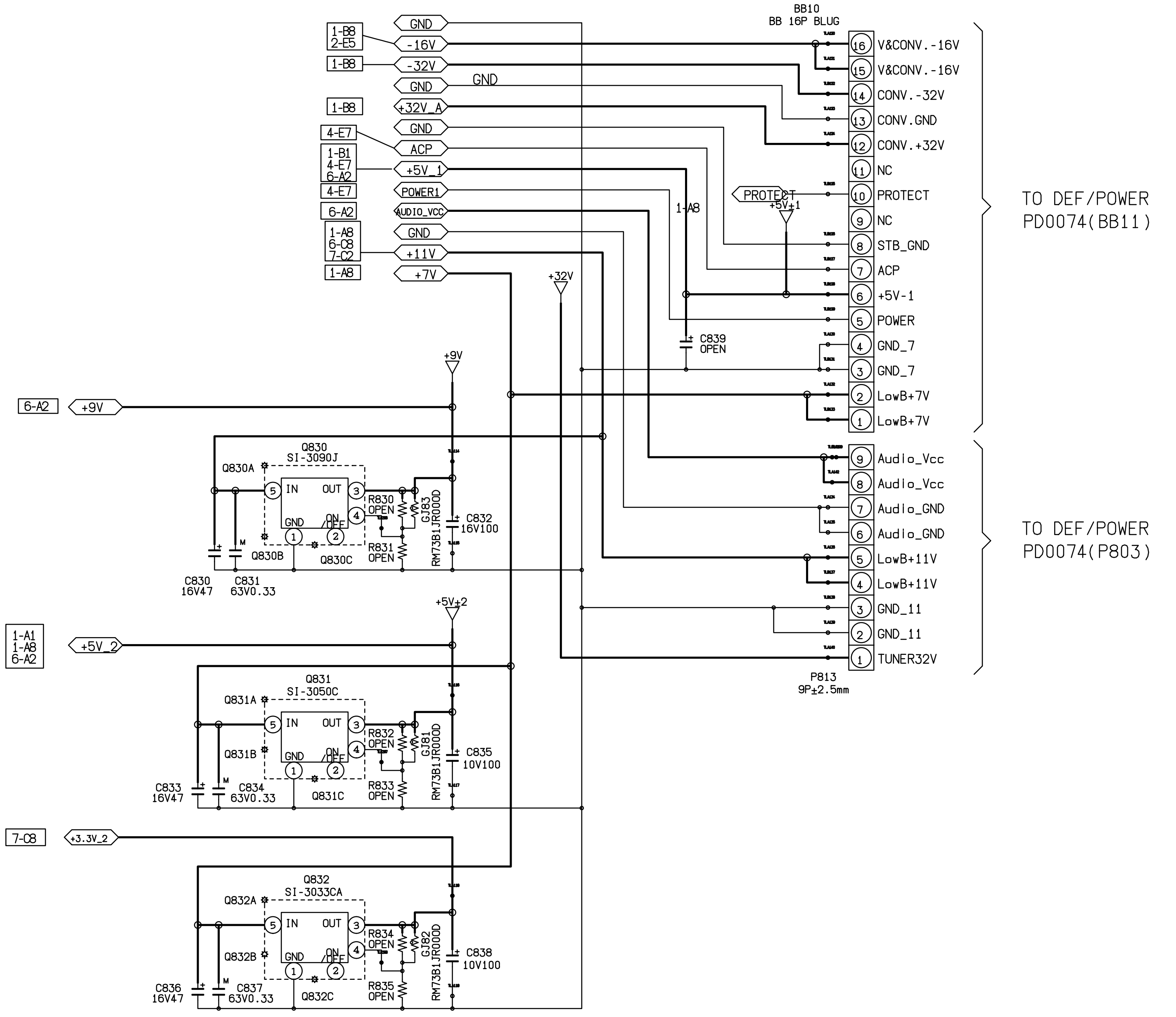

SERVICE
+5V-1
RST
SDA
TO REMOTE
PD0081(PB22)
+5V-1
RMT-IN
GND
RMT-OUT
P112
4P_2.5mm
TO FRONT
PD0081(PB11)
+5V-1
LED
GND
KEY-2
KEY-1
GND
ALS
+5V-2
6P_2.5mm_1.5A_Beige
P111
+5V_1
+5V_2
RB05 1k
QB05 2SC2712Y
RB051 1k
RB050 3.3k
CB05 16V10u
RV38 180k
RV39 330k
CV37 50V3.3u
QA02 AT24C64-10PC
VDD
WP
SCL
SDA
GND
A1
A2
DA45 MA111
DA46 MA111
RA80 100
CA68 16V10u
CA69 0.01
DA02 MA8062-M
DA44 MA111
DA43 MA111
RA031 100
RA021 100
RA77 10k
RA76 10k
RA78 33K
RA79 33K
RB03 33
RB031 33
RB032 33
RB033 10k
QB03 RN1405
RA01 1k
RA02 100
RA03 100
RA04 1k
RA05 1k
RA06 1k
RA07 1k
RA08 1k
RA09 1k
CA09 KETSU
MUTE_A
SPM
RA13 1k
RA14 10k
RA141 10k
RA161 1k
RA17 100
PRST
RA181 10k
CA14 16V10
CA18 16V47u
RA211 OPEN
RA212 OPEN
RA210 OPEN
QA21 OPEN
+9V
QA72 2SC2412K
RA74 15k
RA75 15k
CA73 16V10u
GJ70 KETSU
QA71 2SC2412K
CA72 16V10NP
CA71 330P
RA73 470
V_AV
RA90 KETSU
RA72 3.3k
SGA
CA251 10V47
CA25 0.01
RA28 100
RA30 100
10V1u
DA23 MA111
PIP_V
DB31 MA111
DB30 MA111
QA80 UPC29M33HB
OUT
GND
IN
RA81 47K
QA81 PST9129
CA82 63V0.47
CA81 10V47
CA80 63V0.010
+5V_1
GND
ACP
POWER1
1-B1
5-A2
6-A2
5-A2
5-A2
QB15 2SC2412K
RB14 15k
RB15 15k
CB15 16V10u
GJ80 KETSU
QB14 2SC2412K
RB16 470
CB13 16V10NP
CB14 330P
RB18 KETSU
RB17 3.3k
5
6
7
8
A
B
C
D
E
F

	RA08	RV38	RV39	CV37
4by3	No use	No use	No use	No use
16by9	1K ohm	180K ohm	330K ohm	50V3.3uF

SIGNAL/CONVER(Maicon)

65HDX82 Series

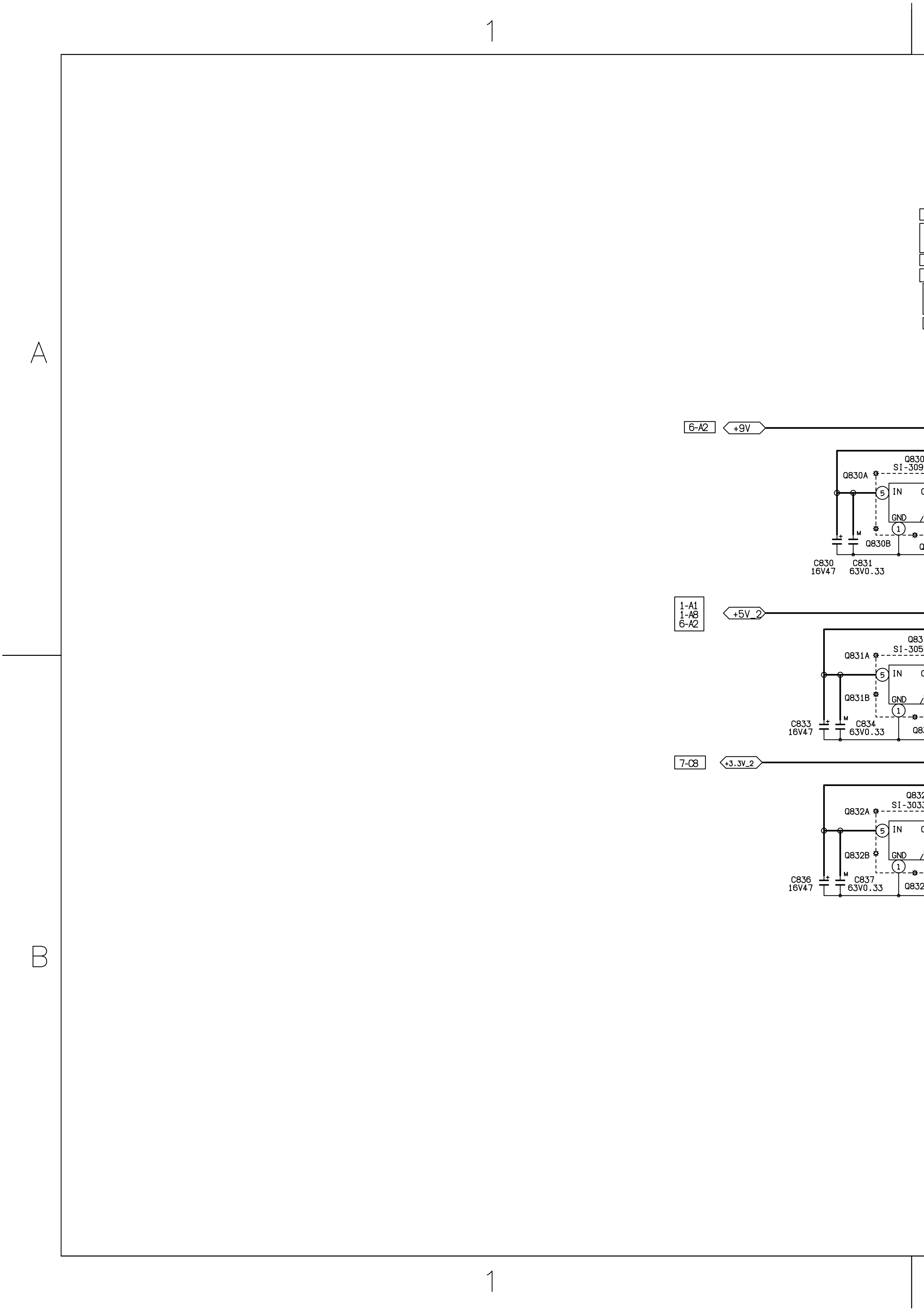
[SHEET-4/7]

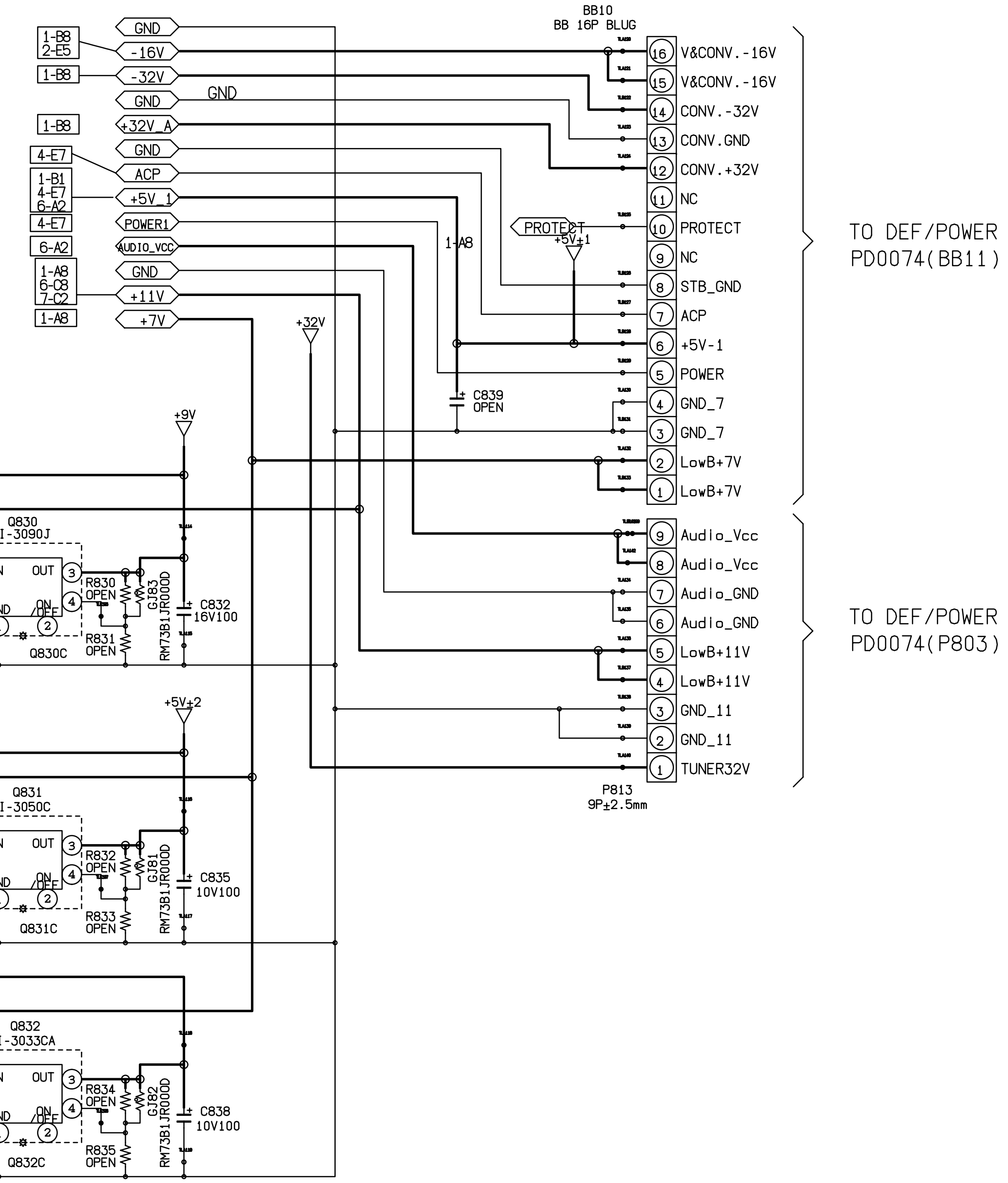

BB10
BB 16P BLUG
1-B8
2-E5
1-B8
1-B8
4-E7
1-B1
4-E7
6-A2
4-E7
6-A2
1-A8
6-C8
7-C2
1-A8
GND
-16V
-32V
GND
GND
+32V_A
GND
ACP
+5V_1
POWER1
AUDIO_VCC
GND
+11V
+7V
1-A8
PROTECT
+5V+1
+32V
C839
OPEN
16 V&CONV.-16V
15 V&CONV.-16V
14 CONV.-32V
13 CONV.GND
12 CONV.+32V
11 NC
10 PROTECT
9 NC
8 STB_GND
7 ACP
6 +5V-1
5 POWER
4 GND_7
3 GND_7
2 LowB+7V
1 LowB+7V
TO DEF/POWER
PD0074(BB11)
9 Audio_Vcc
8 Audio_Vcc
7 Audio_GND
6 Audio_GND
5 LowB+11V
4 LowB+11V
3 GND_11
2 GND_11
1 TUNER32V
P813
9P±2.5mm
TO DEF/POWER
PD0074(P803)
6-A2
+9V
+9V
Q830
SI-3090J
Q830A
IN
OUT
GND
ON
/OFF
Q830B
Q830C
R830
OPEN
R831
OPEN
GJ83
RM73B1JR000D
C832
16V100
C830
16V47
C831
63V0.33
1-A1
1-A8
6-A2
+5V_2
+5V+2
Q831
SI-3050C
Q831A
Q831B
Q831C
R832
OPEN
R833
OPEN
GJ81
RM73B1JR000D
C835
10V100
C833
16V47
C834
63V0.33
7-C8
+3.3V_2
Q832
SI-3033CA
Q832A
Q832B
Q832C
R834
OPEN
R835
OPEN
GJ82
RM73B1JR000D
C838
10V100
C836
16V47
C837
63V0.33

SIGNAL/CONVER(Power)

65HDX82 Series

[SHEET-5/7]


1
A
B
6-A2
+9V
Q830
SI-309
Q830A
IN
GND
5
1
Q830B
C830
16V47
C831
63V0.33
M
1-A1
1-A8
6-A2
+5V_2
Q83
SI-305
Q831A
Q831B
C833
16V47
C834
63V0.33
7-C8
+3.3V_2
Q832
SI-3033
Q832A
Q832B
C836
16V47
C837
63V0.33
1


1-B8
2-E5
1-B8
1-B8
4-E7
1-B1
4-E7
6-A2
4-E7
6-A2
1-A8
6-C8
7-C2
1-A8
GND
-16V
-32V
GND
GND
+32V_A
GND
ACP
+5V_1
POWER1
AUDIO_VCC
GND
+11V
+7V
1-A8
PROTECT
+5V-1
+32V
+9V
+5V-2
C839
OPEN
BB10
BB 16P BLUG
16 V&CONV.-16V
15 V&CONV.-16V
14 CONV.-32V
13 CONV.GND
12 CONV.+32V
11 NC
10 PROTECT
9 NC
8 STB_GND
7 ACP
6 +5V-1
5 POWER
4 GND_7
3 GND_7
2 LowB+7V
1 LowB+7V
TO DEF/POWER
PD0074(BB11)
9 Audio_Vcc
8 Audio_Vcc
7 Audio_GND
6 Audio_GND
5 LowB+11V
4 LowB+11V
3 GND_11
2 GND_11
1 TUNER32V
TO DEF/POWER
PD0074(P803)
P813
9P±2.5mm
Q830
I-3090J
OUT
ON
/OFF
Q830C
R830
OPEN
R831
OPEN
GJ83
RM73B1JR000D
C832
16V100
Q831
I-3050C
OUT
ON
/OFF
Q831C
R832
OPEN
R833
OPEN
GJ81
RM73B1JR000D
C835
10V100
Q832
I-3033CA
OUT
ON
/OFF
Q832C
R834
OPEN
R835
OPEN
GJ82
RM73B1JR000D
C838
10V100

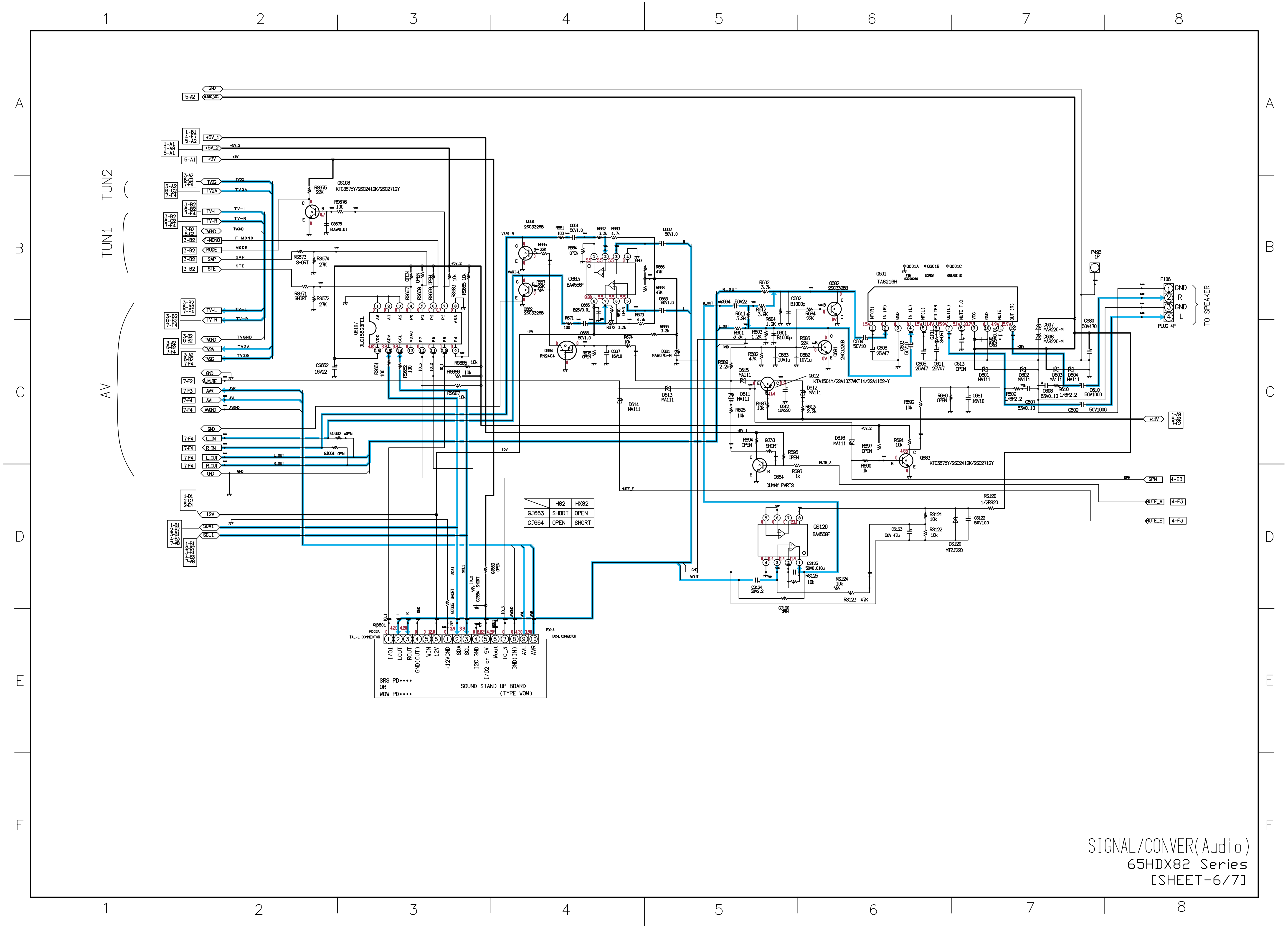
A

B

SIGNAL/CONVER(Power)

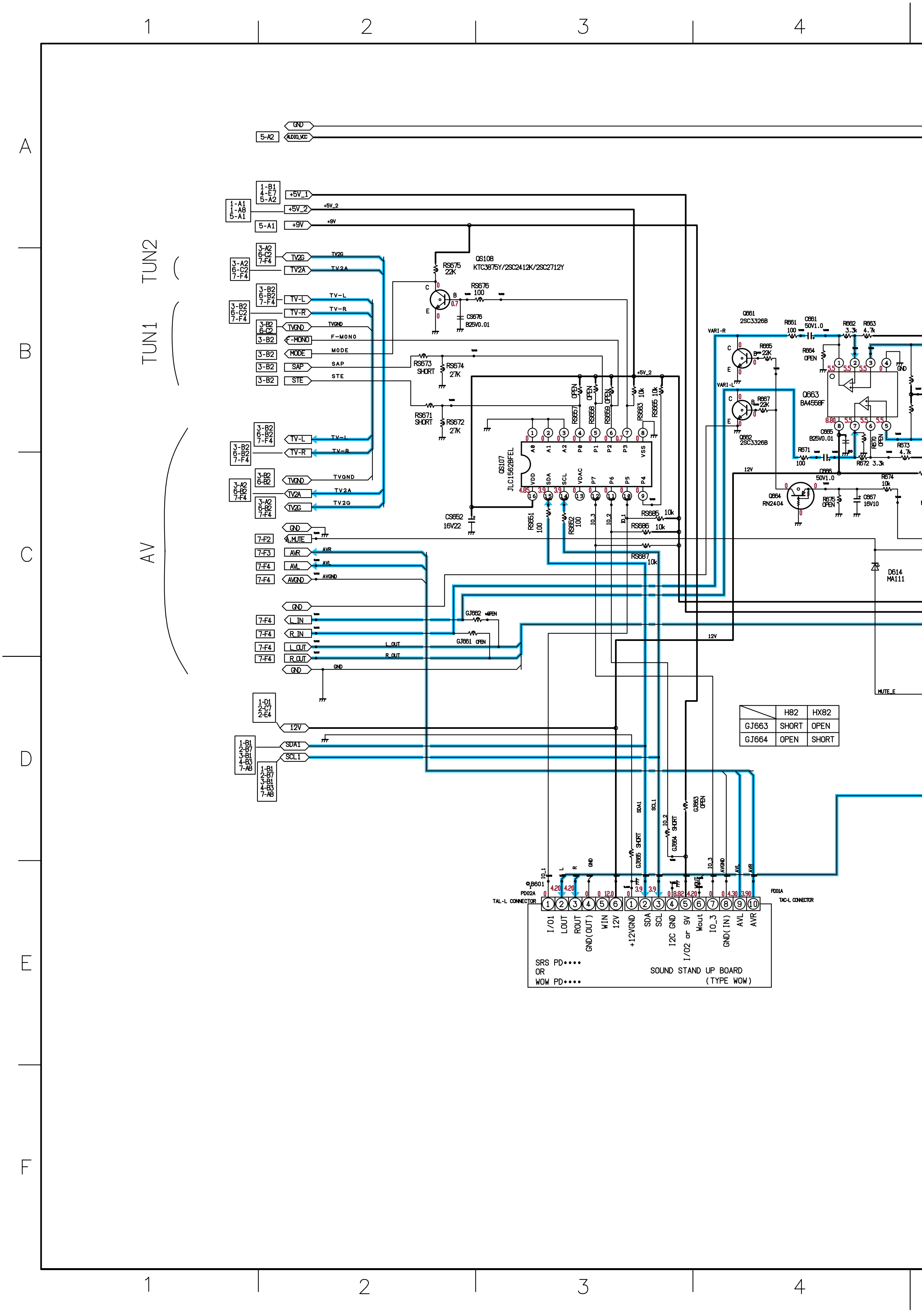
65HDX82 Series

[SHEET-5/7]


TUN2
TUN1
AV
QS108
KTC3875Y/2SC2412K/2SC2712Y
QS107
JLC1562BFEL
Q661
2SC3326B
Q662
2SC3326B
Q663
BA4558F
Q664
RN2404
Q601
TA8216H
Q681
2SC3326B
Q682
2SC3326B
Q612
KTA1504Y/2SA1037AKT14/2SA1162-Y
Q683
KTC3875Y/2SC2412K/2SC2712Y
Q684
DUMMY PARTS
QS120
BA4558F
D607
MA8220-M
D608
MA8220-M
DS120
MTZJ22D
P495
1P
P106
GND
R
GND
L
PLUG 4P
TO SPEAKER
VARI-R
VARI-L
R_OUT
L_OUT
MUTE_A
MUTE_E
SPM
+11V
12V
SDA1
SCL1
+5V_1
+5V_2
+5V
TV2G
TV2A
TV-L
TV-R
TVGND
F-MONO
MODE
SAP
STE
MUTE
AVR
AVL
AVGND
L_IN
R_IN
L_OUT
R_OUT
GND
AUDIO_VCC
TAL-L CONNECTOR
PD02A
I/O1
LOUT
ROUT
GND(OUT)
WIN
12V
+12VGND
SDA
SCL
I2C GND
I/O2 or 9V
Wout
IO_3
GND(IN)
AVL
AVR
SRS PD••••
OR
WOW PD••••
SOUND STAND UP BOARD
(TYPE WOW)
1
2
3
4
5
6
7
8
A
B
C
D
E
F

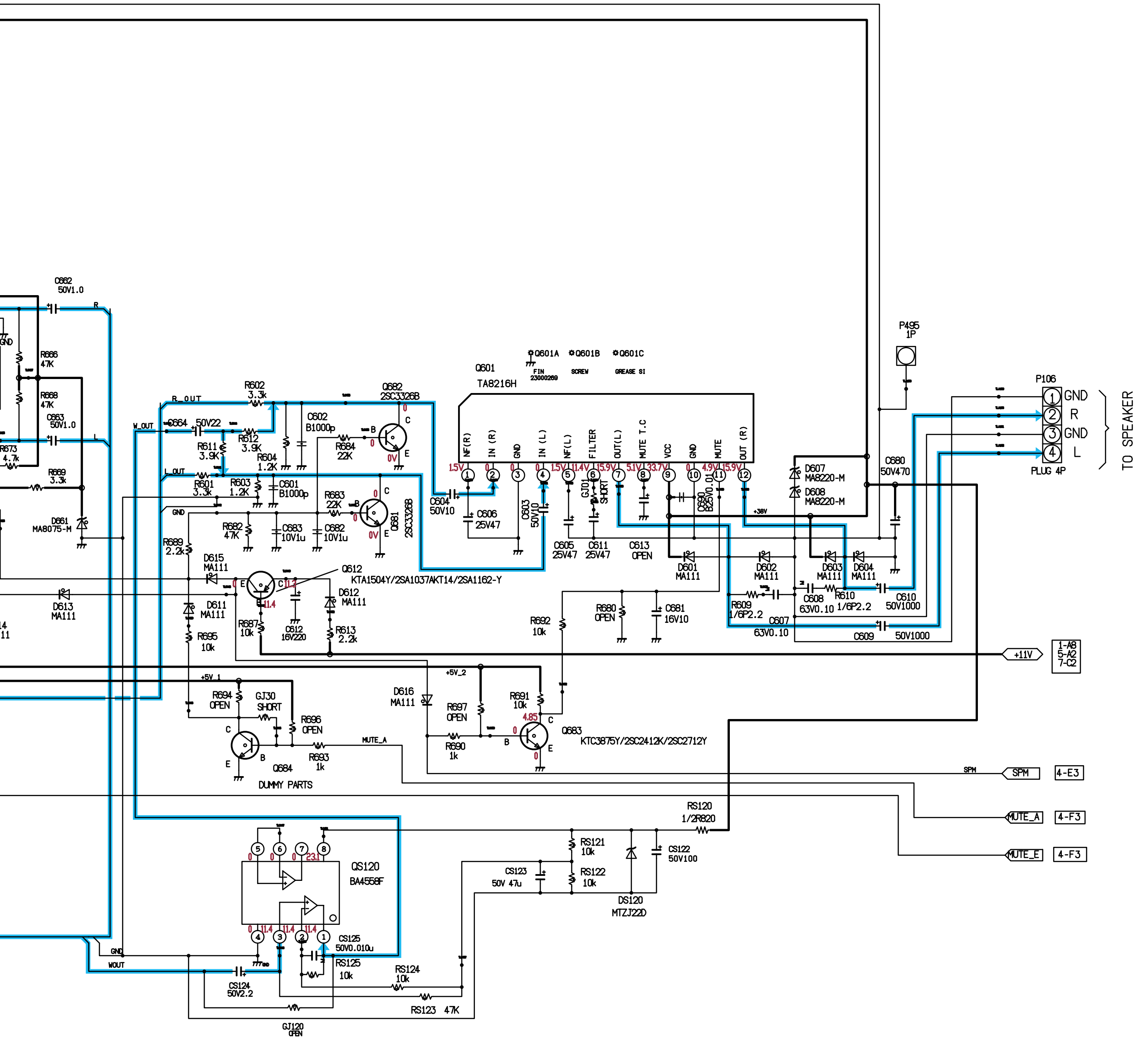
	H82	HX82
GJ663	SHORT	OPEN
GJ664	OPEN	SHORT

SIGNAL/CONVER(Audio)
65HDX82 Series
[SHEET-6/7]



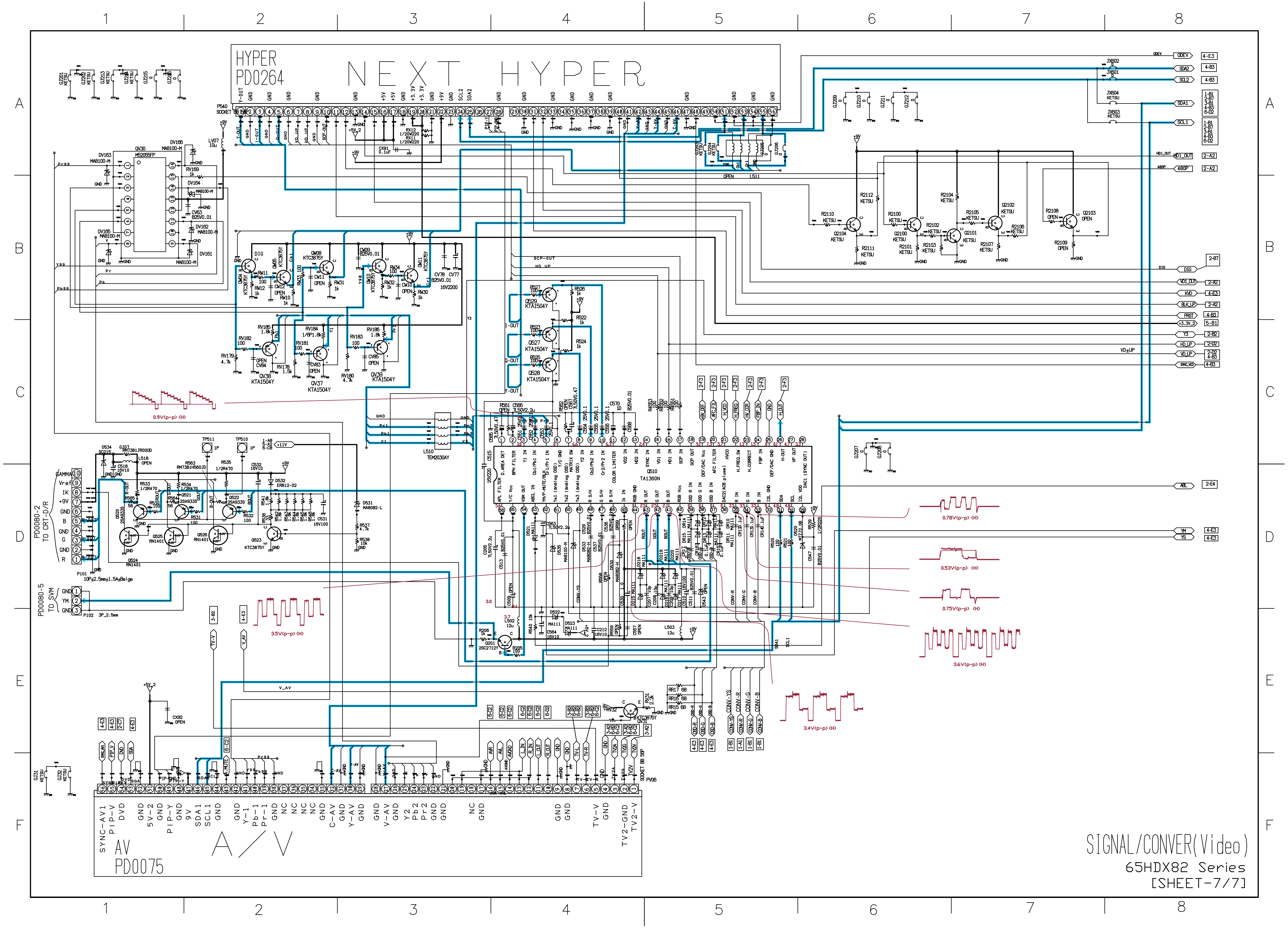
1
2
3
4
A
B
C
D
E
F
GND
5-A2
AUDIO_VCC
1-B1 4-E7 5-A2
+5V_1
1-A1 1-A8 5-A1
+5V_2
5-A1
+9V
TUN2
TUN1
AV
3-A2 6-C2 7-F4
TV2G
TV2A
3-B2 6-B2 7-F4
TV-L
TV-R
3-B2 6-C2
TVGND
3-B2
F-MONO
MODE
SAP
STE
QS108
KTC3875Y/2SC2412K/2SC2712Y
RS675 22K
RS676 100
CS676 B25V0.01
RS673 SHORT
RS674 27K
RS671 SHORT
RS672 27K
QS107
JLC1562BFEL
A0
A1
A2
P0
P1
P2
P3
VSS
VDD
SDA
SCL
VDAC
P7
P6
P5
P4
RS657 OPEN
RS658 OPEN
RS659 OPEN
RS663 10k
RS665 10k
RS651 100
RS652 100
RS685 10k
RS686 10k
RS687 10k
CS652 16V22
IO_3
IO_2
IO_1
7-F2
A_MUTE
7-F3
AVR
7-F4
AVL
AVGND
L_IN
R_IN
L_OUT
R_OUT
GJ662 OPEN
GJ661 OPEN
1-D1 2-C7 2-E4
12V
1-B1 2-B7 3-B1 4-B3 7-A8
SDA1
SCL1
Q661 2SC3326B
Q662 2SC3326B
VARI-R
VARI-L
R661 100
C661 50V1.0
R662 3.3k
R663 4.7k
R664 OPEN
R665 22K
R667 22K
Q663 BA4558F
C665 B25V0.01
R671 100
R672 3.3k
R673 4.7k
R670 OPEN
C666 50V1.0
R674 10k
Q664 RN2404
R675 OPEN
C667 16V10
D614 MA111
MUTE_E
GJ665 SHORT
GJ664 SHORT
GJ663 OPEN
PB601
PD02A
TAL-L CONNECTOR
PD01A
TAC-L CONNECTOR
I/O1
LOUT
ROUT
GND(OUT)
WIN 12V
+12VGND
SDA
SCL
I2C GND
I/O2 or 9V
Wout
IO_3
GND(IN)
AVL
AVR
SRS PD••••
OR
WOW PD••••
SOUND STAND UP BOARD
(TYPE WOW)

	H82	HX82
GJ663	SHORT	OPEN
GJ664	OPEN	SHORT

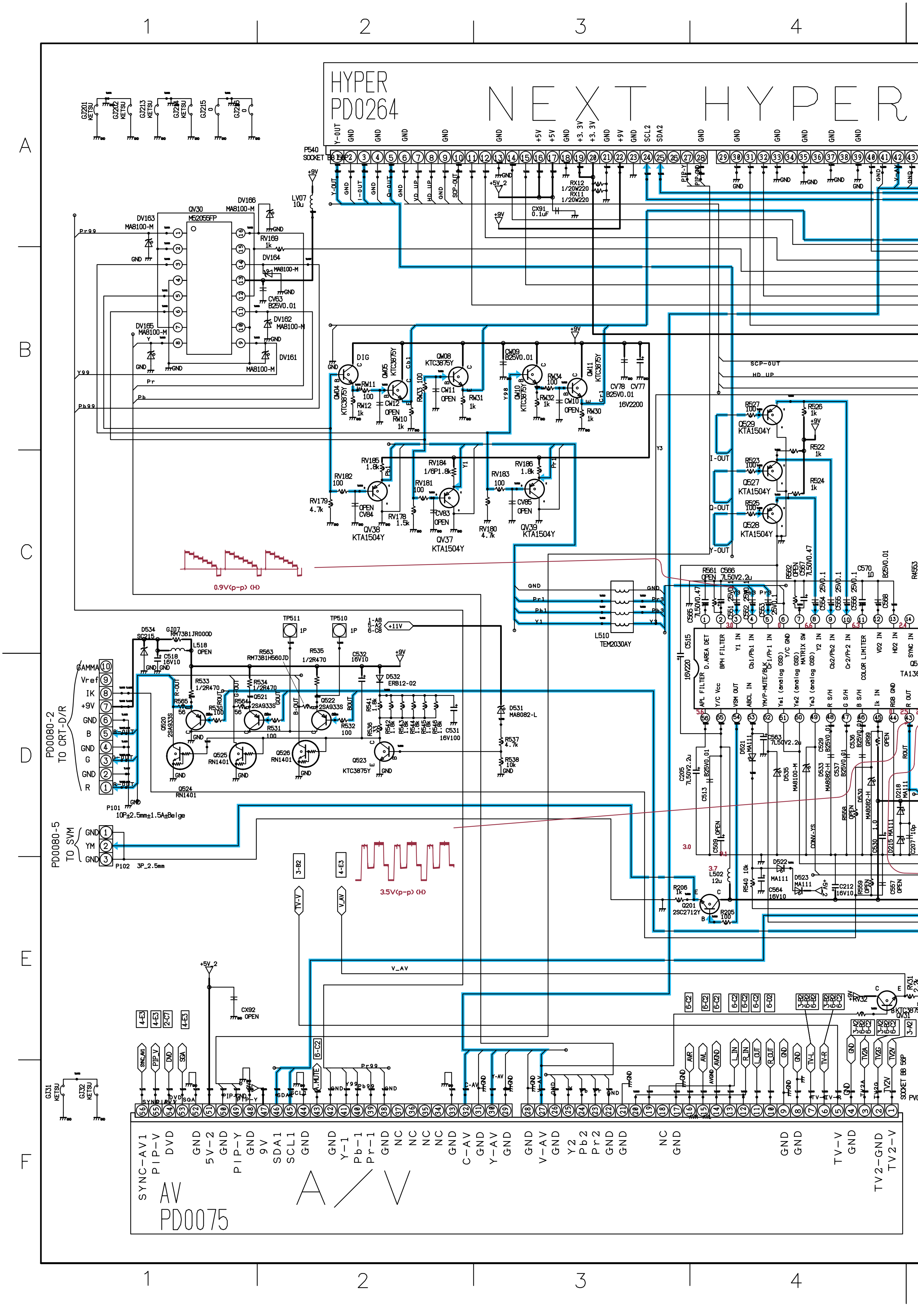


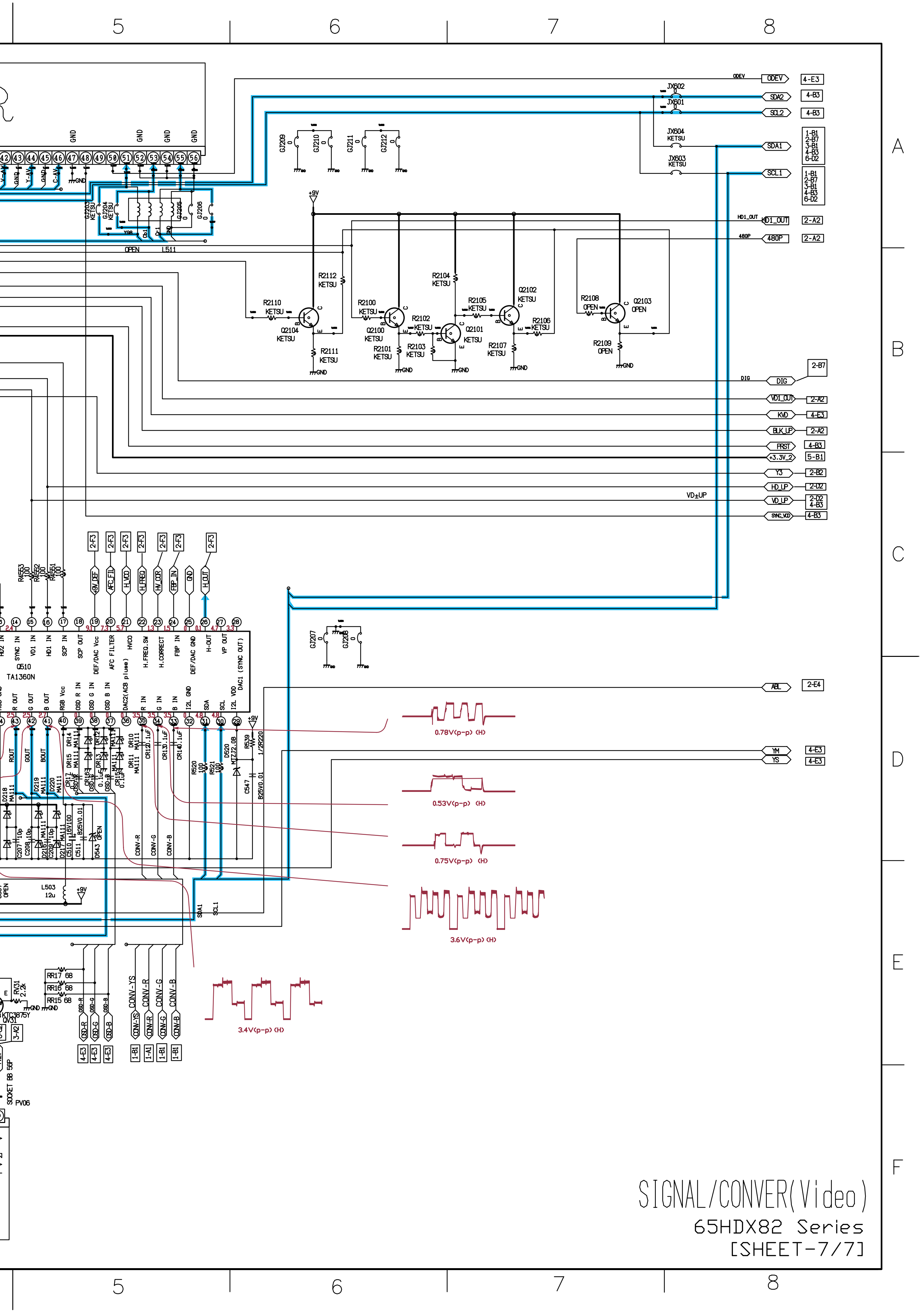
A
B
C
D
E
F
C662 50V1.0
R
R666 47K
R668 47K
C663 50V1.0
L
R673 4.7k
R669 3.3k
D661 MA8075-M
R_OUT
R602 3.3k
Q682 2SC3326B
W_OUT
C664 50V22
R611 3.9K
R612 3.9K
R604 1.2K
C602 B1000p
R684 22K
L_OUT
R601 3.3k
R603 1.2K
C601 B1000p
R683 22K
Q681 2SC3326B
GND
R682 47K
C683 10V1u
C682 10V1u
R689 2.2k
D615 MA111
Q612 KTA1504Y/2SA1037AKT14/2SA1162-Y
D613 MA111
D611 MA111
D612 MA111
R695 10k
R687 10k
C612 16V220
R613 2.2k
Q601 TA8216H
Q601A FIN 23000269
Q601B SCREW
Q601C GREASE SI
NF(R)
IN (R)
GND
IN (L)
NF(L)
FILTER
OUT(L)
MUTE T.C
VCC
GND
MUTE
OUT (R)
1.5V 0 0 0 1.5V 11.4V 15.9V 5.1V 33.7V 0 4.9V 15.9V
C604 50V10
C606 25V47
C603 50V10
GJ01 SHORT
C605 25V47
C611 25V47
C613 OPEN
C690 63V0.01
+38V
D607 MA8220-M
D608 MA8220-M
C680 50V470
P495 1P
P106
GND
R
GND
L
PLUG 4P
TO SPEAKER
D601 MA111
D602 MA111
D603 MA111
D604 MA111
R609 1/6P2.2
C608 63V0.10
R610 1/6P2.2
C610 50V1000
C607 63V0.10
C609 50V1000
R692 10k
R680 OPEN
C681 16V10
+11V
1-A8 5-A2 7-C2
+5V_1
R694 OPEN
GJ30 SHORT
R696 OPEN
Q684 DUMMY PARTS
R693 1k
MUTE_A
D616 MA111
+5V_2
R697 OPEN
R691 10k
R690 1k
Q683 KTC3875Y/2SC2412K/2SC2712Y
4.85
SPM
4-E3
MUTE_A 4-F3
MUTE_E 4-F3
RS120 1/2R820
QS120 BA4558F
23.1
11.4
RS121 10k
RS122 10k
CS123 50V 47u
CS122 50V100
DS120 MTZJ22D
CS125 50V0.010u
RS125 10k
RS124 10k
RS123 47K
CS124 50V2.2
GJ120 OPEN
GND
WOUT

SIGNAL/CONVER(Audio)
65HDX82 Series
[SHEET-6/7]


HYPER
PD0264
NEXT HYPER
P540 SOCKET
TA1360N
Q510
TEM2030AY
L510
PD0080-2
TO CRT-D/R
PD0080-5
TO SVM
AV
PD0075
A/V
0.9V(p-p) (H)
3.5V(p-p) (H)
0.78V(p-p) (H)
0.53V(p-p) (H)
0.75V(p-p) (H)
3.6V(p-p) (H)
3.4V(p-p) (H)
MS2055FP
KTA1504Y
KTC3875Y
2SC2712Y
RN1401
2SA933S
SOCKET 88 59P
PV06
1
2
3
4
5
6
7
8
A
B
C
D
E
F

SIGNAL/CONVER(Video)
65HDX82 Series
[SHEET-7/7]


HYPER
PD0264
NEXT HYPER
P540 SOCKET BB 56P
QV30 M52055FP
DV163 MA8100-M
DV166 MA8100-M
DV164 MA8100-M
DV165 MA8100-M
DV162 MA8100-M
DV161
RV169 1k
CV63 B25V0.01
LV07 10u
Pr99
Y99
Pb99
QW04 KTC3875Y
QW05 KTC3875Y
QW08 KTC3875Y
QW10 KTC3875Y
QW11 KTC3875Y
QV38 KTA1504Y
QV37 KTA1504Y
QV39 KTA1504Y
Q529 KTA1504Y
Q527 KTA1504Y
Q528 KTA1504Y
CW09 B25V0.01
CV78 CV77 B25V0.01 16V2200
RX12 1/20W220
RX11 1/20W220
CX91 0.1uF
SCP-OUT
HD UP
I-OUT
Q-OUT
Y-OUT
0.9V(p-p) (H)
3.5V(p-p) (H)
L510 TEM2030AY
GND
Pr1
Pb1
Y1
TP511 1P
TP510 1P
1-A8 5-A2 6-C8
+11V
D534 SC215
GI07 RM73B1JR000D
L518 OPEN
C518 16V10
R563 RM73B1H560JD
R535 1/2R470
C532 16V10
D532 ERB12-02
D531 MA8082-L
R537 4.7k
R538 10k
R533 1/2R470
R534 1/2R470
Q520 2SA933S
Q521 2SA933S
Q522 2SA933S
Q525 RN1401
Q526 RN1401
Q524 RN1401
Q523 KTC3875Y
C531 16V100
PD0080-2 TO CRT-D/R
GAMMA
Vref
IK
+9V
GND
B
G
R
P101 10P±2.5mm±1.5A±Beige
PD0080-5 TO SVM
YM
P102 3P_2.5mm
3-B2
4-E3
TV-V
V_AV
CX92 OPEN
+5V_2
Q201 2SC2712Y
R206 1k
R205 100
L502 12u
C564 16V10
C212 16V10
D522 MA111
D523 MA111
C505 16V220
APL FILTER
D.AREA DET
BPH FILTER
Y1 IN
Cb1/Pb1 IN
Cr1/Pr1 IN
Y/C GND
MATRIX SW
Y2 IN
Cb2/Pb2 IN
Cr2/Pr2 IN
COLOR LIMITER
VD2 IN
HD2 IN
SYNC IN
Y/C Vcc
YSM OUT
ABCL IN
YM/P-MUTE/BLK
Ys1 (analog OSD)
Ys2 (analog OSD)
Ys3 (analog OSD)
R S/H
G S/H
B S/H
Ik IN
RGB GND
R OUT
TA13
GJ31 KETSU
GJ32 KETSU
SOCKET BB 56P
AV
PD0075
A/V
SYNC-AV1
PIP-V
DVD
5V-2
PIP-Y
9V
SDA1
SCL1
Y-1
Pb-1
Pr-1
NC
C-AV
Y-AV
V-AV
Y2
Pb2
Pr2
TV-V
TV2-GND
TV2-V
A
B
C
D
E
F
1
2
3
4

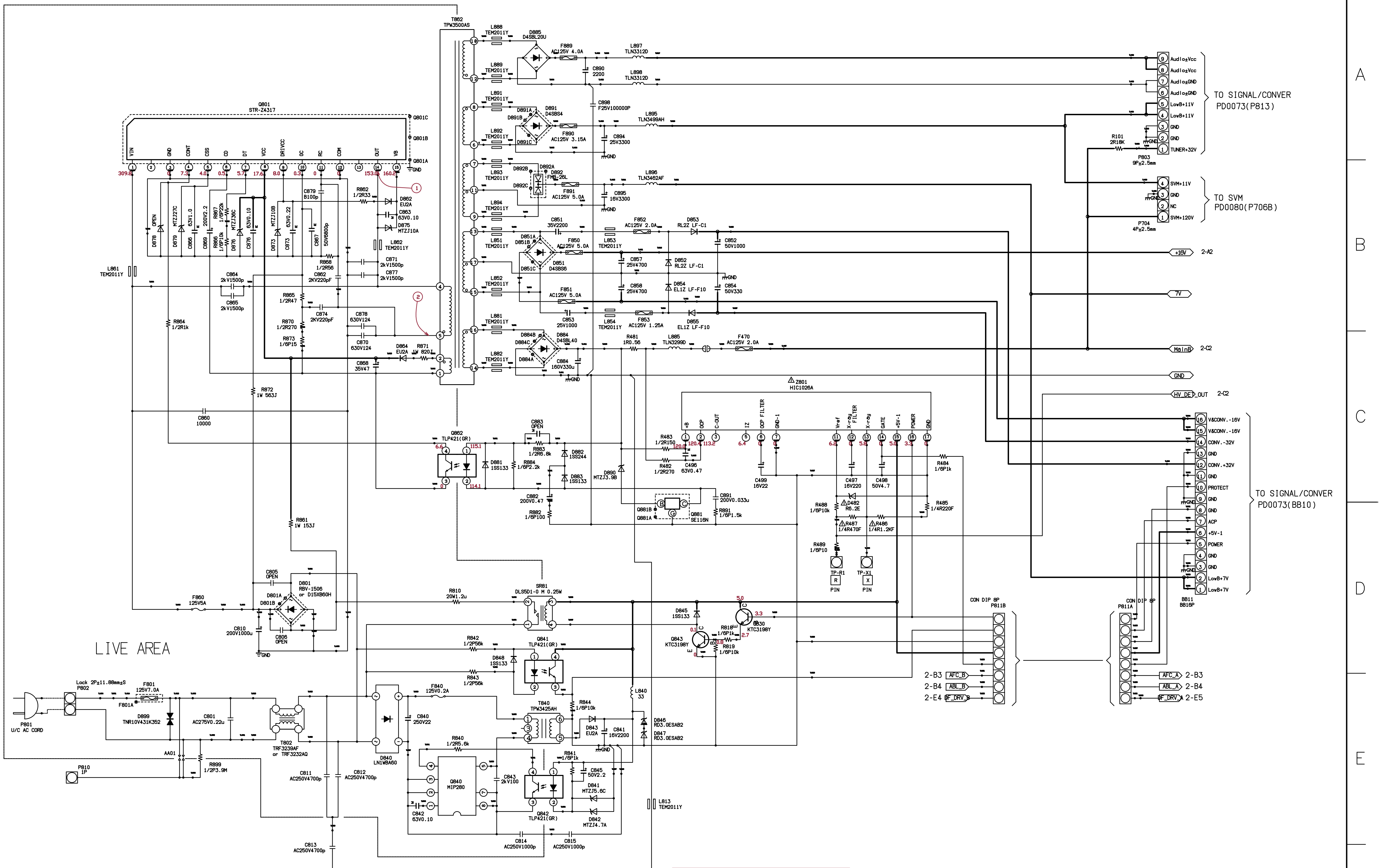


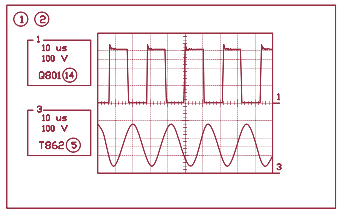
5
6
7
8
A
B
C
D
E
F
GND
ODEV
SDA2
SCL2
SDA1
SCL1
4-E3
4-B3
1-B1 2-B7 3-B1 4-B3 6-D2
JX602
JX601
JX604 KETSU
JX603 KETSU
GJ209
GJ210
GJ211
GJ212
GJ203 KETSU
GJ204 KETSU
GJ205
GJ206
L511
OPEN
+9V
HD1_OUT
480P
2-A2
R2112 KETSU
R2110 KETSU
Q2104 KETSU
R2111 KETSU
R2100 KETSU
Q2100 KETSU
R2101 KETSU
R2102 KETSU
R2103 KETSU
Q2101 KETSU
R2104 KETSU
R2105 KETSU
Q2102 KETSU
R2106 KETSU
R2107 KETSU
R2108 OPEN
Q2103 OPEN
R2109 OPEN
DIG
2-B7
VD1_OUT
KVD
BLK_UP
FRST
+3.3V_2
5-B1
Y3
2-B2
HD_UP
2-D2
VD_UP
VD±UP
SYNC_VCD
+9V_DEF
AFC_FIL
H_VCO
H_FREQ
HV_COR
FBP_IN
GND
H_OUT
2-F3
Q510
TA1360N
SYNC IN
VD1 IN
HD1 IN
SCP IN
SCP OUT
DEF/DAC Vcc
AFC FILTER
HVCO
H.FREQ.SW
H.CORRECT
FBP IN
DEF/DAC GND
H-OUT
VP OUT
DAC1 (SYNC OUT)
R OUT
G OUT
B OUT
RGB Vcc
OSD R IN
OSD G IN
OSD B IN
DAC2(ACB pluse)
R IN
G IN
B IN
I2L GND
SDA
SCL
I2L VDD
GJ207
GJ208
ABL
2-E4
YM
YS
4-E3
0.78V(p-p) (H)
0.53V(p-p) (H)
0.75V(p-p) (H)
3.6V(p-p) (H)
3.4V(p-p) (H)
D520 MTZJ2.0B
R539 1/2R220
C547 B25V0.01
R520 100
R521 100
L503 12u
CONV-R
CONV-G
CONV-B
CONV-YS
OSD-R
OSD-G
OSD-B
RR17 68
RR16 68
RR15 68
RV31 2.2k
QV31 KTC3875Y
SOCKET BB 56P
PV06
1-B1
1-A1
3-A2

SIGNAL/CONVER(Video)

65HDX82 Series

[SHEET-7/7]


T862
TPW3500AS
Q801
STR-Z4317
VIN
GND
CONT
CSS
CD
DT
VCC
DRIVCC
OC
RC
COM
OUT
VB
309.0
153.0
160.2
L861
TEM2011Y
L888
TEM2011Y
D885
D4SBL20U
F889
AC125V 4.0A
L897
TLN3312D
C890
2200
L898
TLN3312D
L891
TEM2011Y
D891
D4SBS4
C898
F25V100000P
L895
TLN3499AH
F890
AC125V 3.15A
C894
25V3300
L892
TEM2011Y
L893
TEM2011Y
D892
FML-26L
F891
AC125V 5.0A
L896
TLN3462AF
C895
16V3300
L894
TEM2011Y
C851
35V2200
F852
AC125V 2.0A
D853
RL2Z LF-C1
C852
50V1000
L851
TEM2011Y
F850
AC125V 5.0A
L853
TEM2011Y
D851
D4SB60
C857
25V4700
D852
RL2Z LF-C1
L852
TEM2011Y
F851
AC125V 5.0A
C858
25V4700
D854
EL1Z LF-F10
C854
50V330
L881
TEM2011Y
C853
25V1000
L854
TEM2011Y
F853
AC125V 1.25A
D855
EL1Z LF-F10
D884
D4SBL40
R481
1R0.56
L885
TLN32990
F470
AC125V 2.0A
L882
TEM2011Y
C884
160V330u
Audio±Vcc
Audio±Vcc
Audio±GND
Audio±GND
LowB+11V
LowB+11V
GND
GND
TUNER+32V
R101
2R18K
P803
9P±2.5mm
TO SIGNAL/CONVER
PD0073(P813)
SVM+11V
GND
NC
SVM+120V
P704
4P±2.5mm
TO SVM
PD0080(P706B)
+16V
2-A2
7V
MainB
2-C2
GND
HV_DET_OUT
2-C2
Z801
HIC1026A
V&CONV.-16V
V&CONV.-16V
CONV.-32V
GND
CONV.+32V
GND
PROTECT
GND
GND
ACP
+5V-1
POWER
GND
GND
LowB+7V
LowB+7V
BB11
BB16P
TO SIGNAL/CONVER
PD0073(BB10)
Q862
TLP421(GR)
D890
MTZJ3.9B
Q881
SE116N
TP-R1
R
PIN
TP-X1
X
PIN
CON DIP 8P
P811B
CON DIP 8P
P811A
2-B3
AFC_B
2-B4
ABL_B
2-E4
SF_DRV_B
AFC_A
2-B3
ABL_A
2-B4
SF_DRV_A
2-E5
SR81
DLS5D1-O M 0.25W
R810
20W1.2u
Q830
KTC3198Y
Q843
KTC3198Y
Q841
TLP421(GR)
D801
RBV-1506
or D15XB60H
F860
125V5A
C810
200V1000u
C805
OPEN
C806
OPEN
LIVE AREA
P801
U/C AC CORD
P802
F801
125V7.0A
D899
TNR10V431K352
C801
AC275V0.22u
T802
TRF3239AF
or TRF3232AQ
P810
1P
R899
1/2F3.9M
C811
AC250V4700p
C812
AC250V4700p
C813
AC250V4700p
D840
LN1WBA60
C840
250V22
F840
125V0.2A
T840
TPW3425AH
Q840
MIP280
C842
63V0.10
C843
2kV100
Q842
TLP421(GR)
D841
MTZJ5.6C
D842
MTZJ4.7A
C814
AC250V1000p
C815
AC250V1000p
L840
33
L813
TEM2011Y
D846
RD3.0ESAB2
D847
RD3.0ESAB2
C841
16V2200
D843
EU2A



NOTE|

1. RESISTOR Resistance is shown in ohm [k = 1,000. M = 1,000,000] , All resistors sre 1/6W and 5% tolerance carbon resistor,unless otherwise noted as the following marks.

1/2R | Metal or Metal oxide of 1/2 watt 1/2S | Solid of 1/2 watt

1RF | Fuse resistor of 1 watt 10W | Cement of 10 watts

K = ±10% G = 2% F = 1%

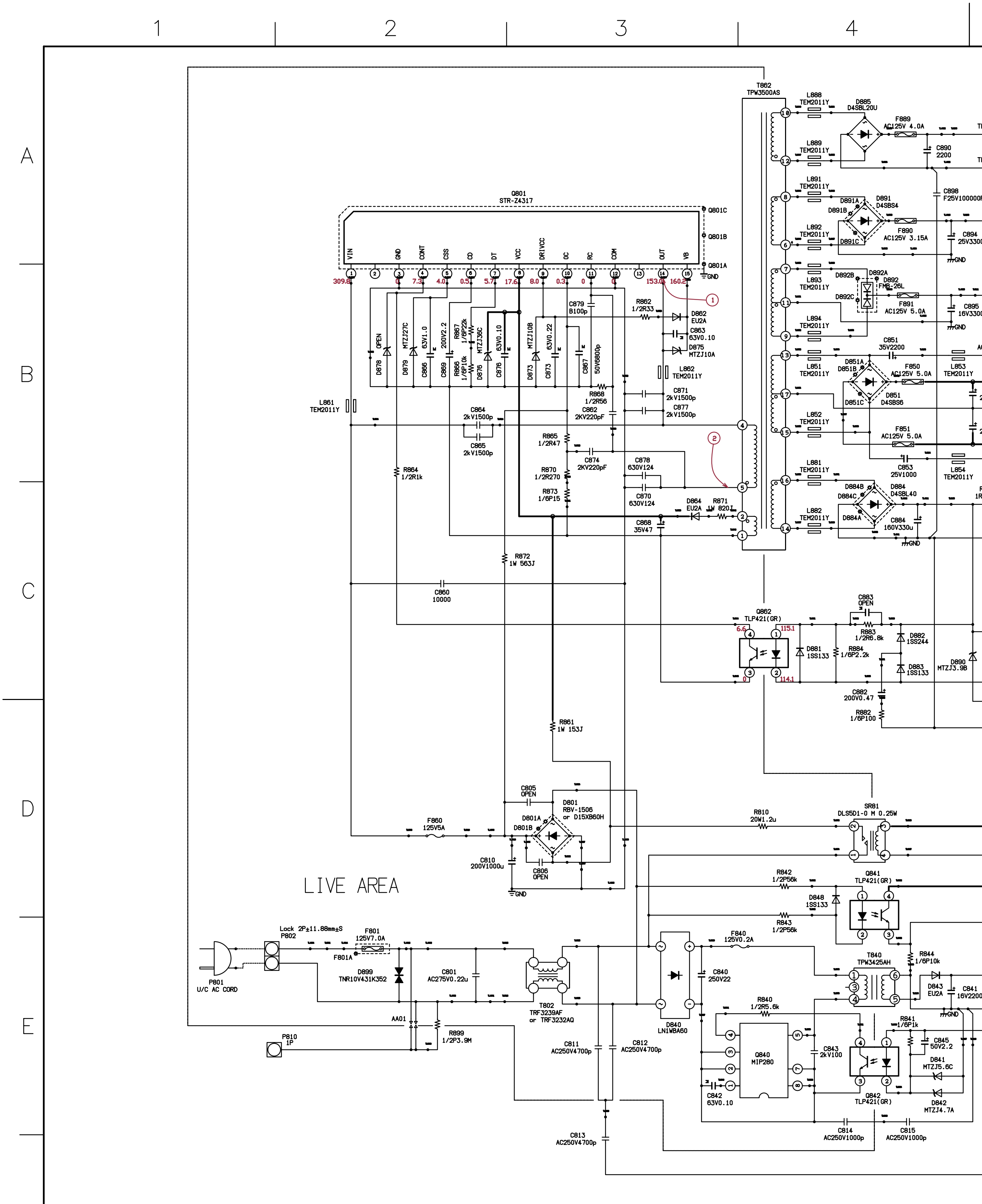
2.CAPACITOR Unless otherwise noted in schematic,all capacitor valuse less than 1 are expressed in µF,and the values more than 1 in pF.
All capacitors are ceramic 50V, unless otherwise noted as the following marks.

⊣⊢ Electrolitic capacitor ⊣⊢ Mylar capacitor

3. The parts indicated with " " have special characteristics should be replaced with identical parts only.

4. This schematic diagram is the latest the time of copying, so it must be changet in acordance with all informed modification notices.

POWER/DEF(POWER)
65HDX82 Series
[SHEET-1/2]


1
2
3
4
A
B
C
D
E
F
Q801
STR-Z4317
VIN
GND
CONT
CSS
CD
DT
VCC
DRIVCC
OC
RC
COM
OUT
VB
Q801C
Q801B
Q801A
309.8
7.3
4.0
0.5
5.7
17.6
8.0
0.3
153.0
160.2
T862
TPW3500AS
L888
TEM2011Y
D885
D4SBL20U
F889
AC125V 4.0A
L889
TEM2011Y
C890
2200
C898
F25V100000P
L891
TEM2011Y
D891A
D891B
D891C
D891
D4SBS4
F890
AC125V 3.15A
L892
TEM2011Y
C894
L893
TEM2011Y
D892A
D892B
D892C
D892
FMB-26L
F891
AC125V 5.0A
C895
L894
TEM2011Y
C851
35V2200
D851A
D851B
D851C
D851
D4SBS6
F850
AC125V 5.0A
L851
TEM2011Y
L853
TEM2011Y
L852
TEM2011Y
F851
AC125V 5.0A
C853
25V1000
L854
TEM2011Y
L881
TEM2011Y
D884B
D884C
D884A
D884
D4SBL40
L882
TEM2011Y
C884
160V330u
GND
D878
OPEN
D879
MTZJ27C
C866
63V1.0
C869
200V2.2
R866
1/6P10k
R867
1/6P22k
D876
MTZJ36C
C876
63V0.10
D873
MTZJ10B
C873
63V0.22
C867
50V6800p
C879
B100p
R862
1/2R33
D862
EU2A
C863
63V0.10
D875
MTZJ10A
L862
TEM2011Y
R868
1/2R56
C871
2kV1500p
C877
2kV1500p
C862
2KV220pF
L861
TEM2011Y
C864
2kV1500p
C865
2kV1500p
R865
1/2R47
C874
2KV220pF
C878
630V124
R870
1/2R270
R873
1/6P15
C870
630V124
D864
EU2A
R871
1W 820J
C868
35V47
R864
1/2R1k
R872
1W 563J
C860
10000
Q862
TLP421(GR)
6.6
115.1
114.1
0
C883
OPEN
R883
1/2R6.8k
D882
1SS244
D881
1SS133
R884
1/6P2.2k
D883
1SS133
D890
MTZJ3.9B
C882
200V0.47
R882
1/6P100
R861
1W 153J
C805
OPEN
D801
RBV-1506
or D15XB60H
D801A
D801B
F860
125V5A
C810
200V1000u
C806
OPEN
R810
20W1.2u
SR81
DLS501-0 M 0.25W
LIVE AREA
R842
1/2P56k
Q841
TLP421(GR)
D848
1SS133
R843
1/2P56k
Lock 2P±11.88mm±S
P802
F801
125V7.0A
F801A
P801
U/C AC CORD
D899
TNR10V431K352
C801
AC275V0.22u
T802
TRF3239AF
or TRF3232AQ
F840
125V0.2A
C840
250V22
D840
LN1WBA60
T840
TPW3425AH
R844
1/6P10k
D843
EU2A
C841
16V2200
AA01
R899
1/2P3.9M
P810
1P
C811
AC250V4700p
C812
AC250V4700p
R840
1/2R5.6k
Q840
MIP280
C843
2kV100
R841
1/6P1k
C845
50V2.2
D841
MTZJ5.6C
C842
63V0.10
Q842
TLP421(GR)
D842
MTZJ4.7A
C814
AC250V1000p
C815
AC250V1000p
C813
AC250V4700p

NOTE|

1. RESISTOR Resistance is shown in ohm [k = 1,000. M = 1,000,000] , All resistors sre 1/6W and 5% tolerance carbon resistor,unless otherwise noted as the following marks.

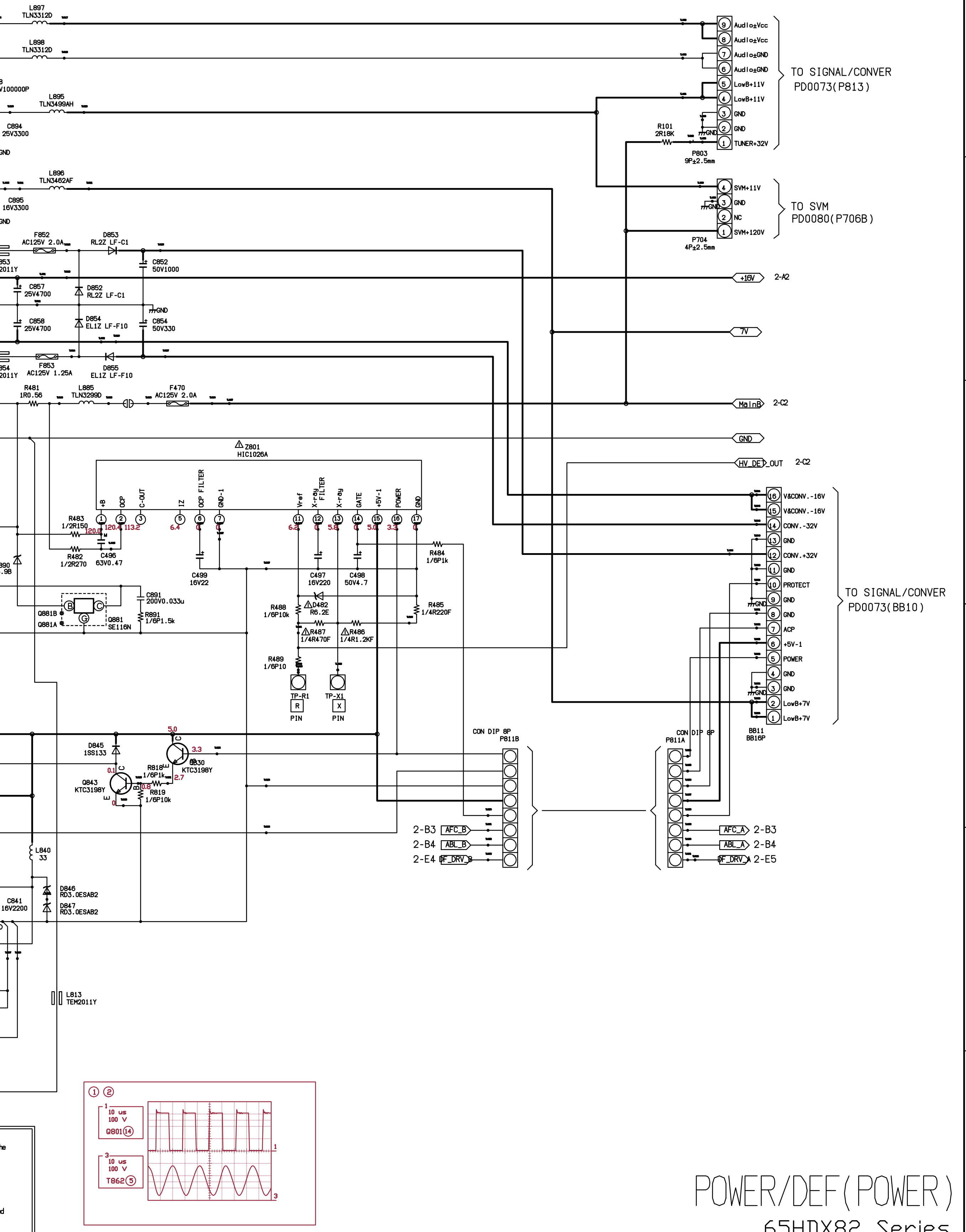
1/2R | Metal or Metal oxide of 1/2 watt
1/2S | Solid of 1/2 watt
1RF | Fuse resistor of 1 watt
10W | Cement of 10 watts
K = ±10% G = 2% F = 1%

2.CAPACITOR Unless otherwise noted in schematic,all capacitor valuse less than 1 are expressed in μF,and the values more than 1 in pF.
All capacitors are ceramic 50V, unless otherwise noted as the following marks.

⁺⊣⊢ Electrolitic capacitor ⁼⊣⊢ Mylar capacitor

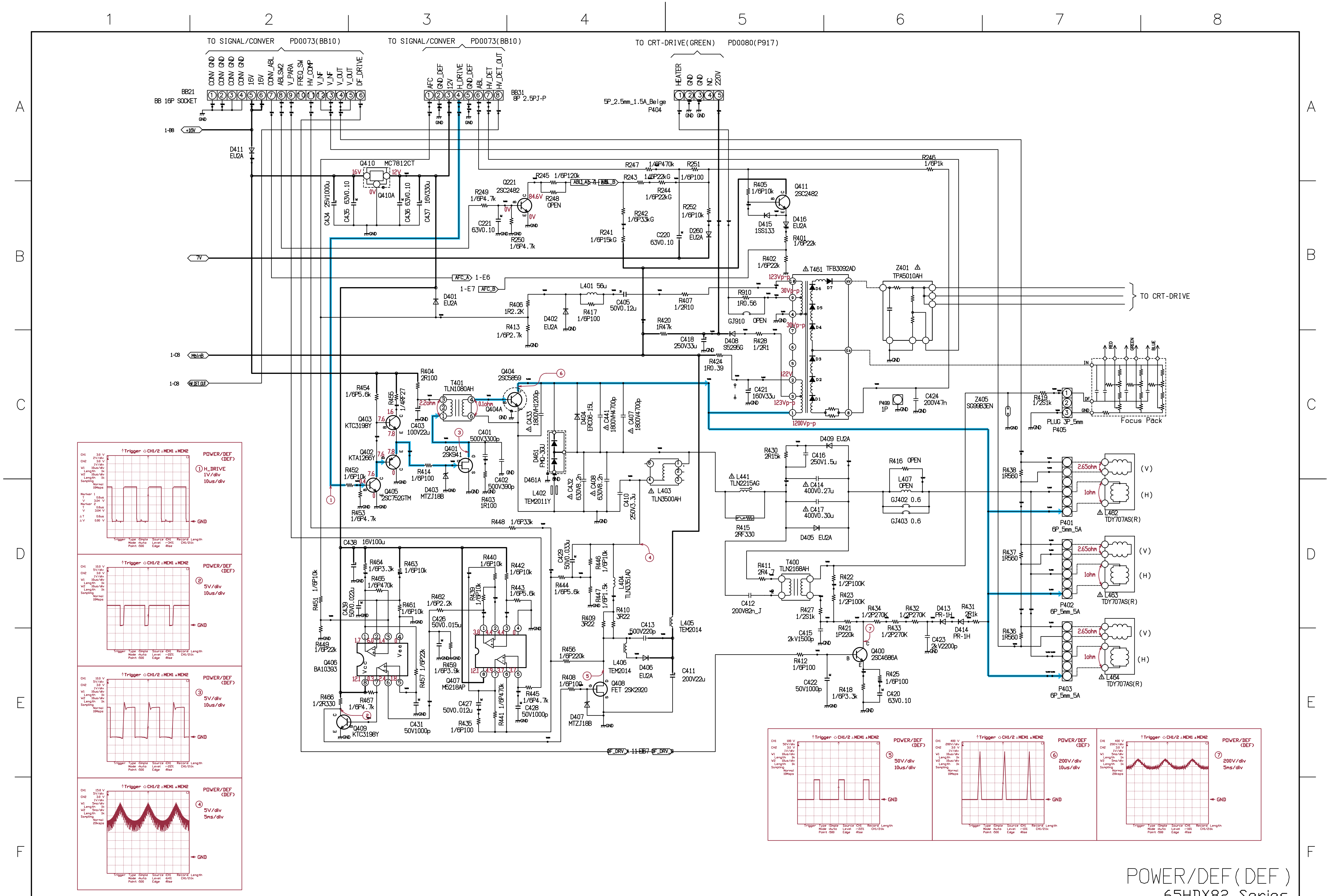
3. The parts indicated with " " have special characteristics should be replaced with identical parts only.

4. This schematic diagram is the latest the time of copying, so it must be changet in acordance with all informed modification notices.

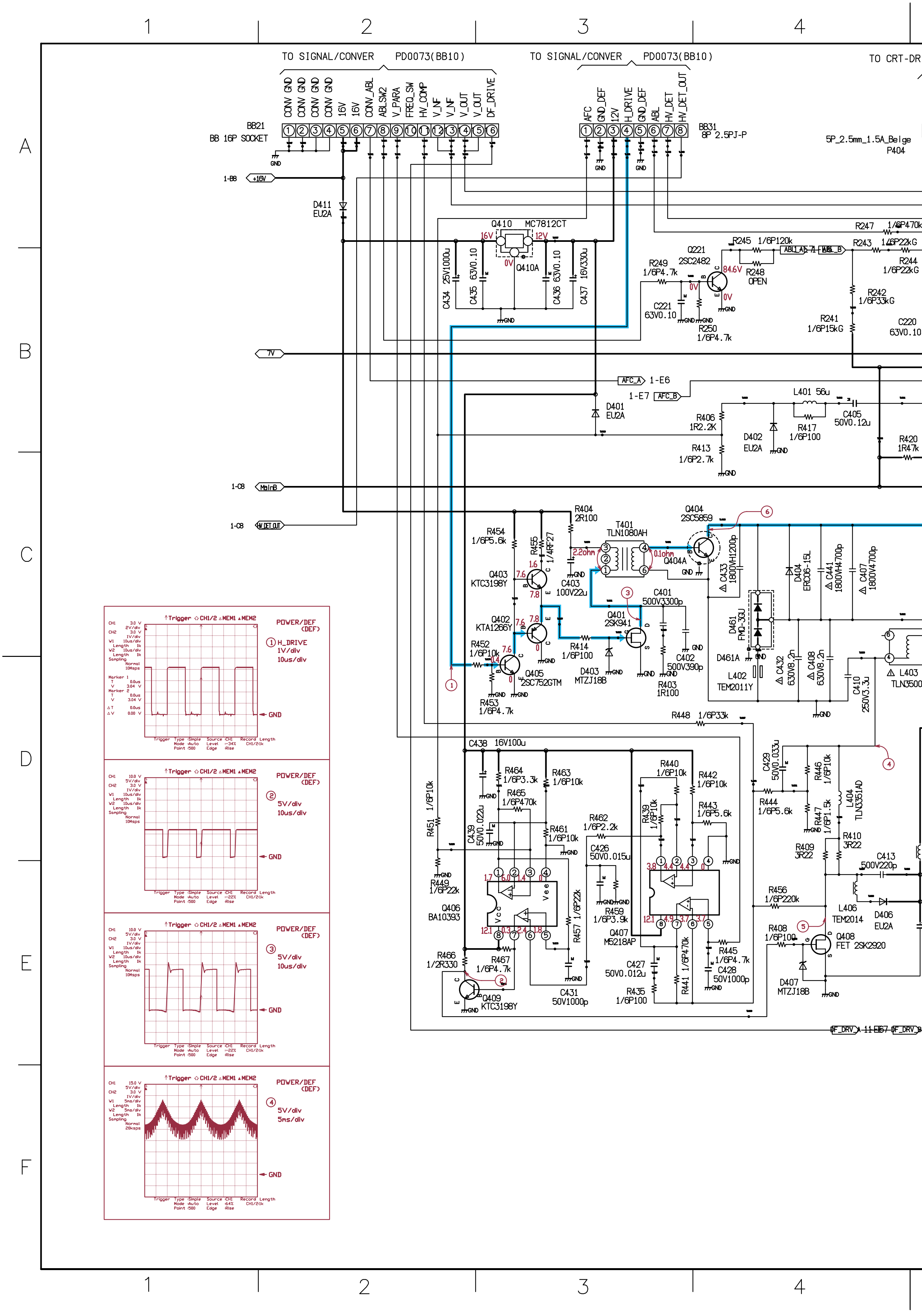

L897
TLN3312D
L898
TLN3312D
V100000P
L895
TLN3499AH
C894
25V3300
GND
L896
TLN3462AF
C895
16V3300
GND
F852
AC125V 2.0A
D853
RL2Z LF-C1
C852
50V1000
C857
25V4700
D852
RL2Z LF-C1
GND
C858
25V4700
D854
EL1Z LF-F10
C854
50V330
F853
AC125V 1.25A
D855
EL1Z LF-F10
2011Y
R481
1R0.56
L885
TLN3299D
F470
AC125V 2.0A
Z801
HIC1026A
+B
OCP
C-OUT
IZ
OCP FILTER
GND-1
Vref
X-ray FILTER
X-ray
GATE
+5V-1
POWER
GND
6.4
6.2
5.8
5.0
3.3
120.0
120.4
113.2
R483
1/2R150
R482
1/2R270
C496
63V0.47
C499
16V22
C497
16V220
C498
50V4.7
R484
1/6P1k
R485
1/4R220F
D482
R6.2E
R488
1/6P10k
R487
1/4R470F
R486
1/4R1.2KF
R489
1/6P10
TP-R1
R
PIN
TP-X1
X
PIN
C891
200V0.033u
R891
1/6P1.5k
Q881B
Q881A
Q881
SE116N
B
C
G
D845
1SS133
Q843
KTC3198Y
Q830
KTC3198Y
R818
1/6P1k
R819
1/6P10k
0.1
0.8
2.7
CON DIP 8P
P811B
CON DIP 8P
P811A
2-B3 AFC_B
2-B4 ABL_B
2-E4 DF_DRV_B
AFC_A 2-B3
ABL_A 2-B4
DF_DRV_A 2-E5
L840
33
D846
RD3.0ESAB2
D847
RD3.0ESAB2
C841
16V2200
L813
TEM2011Y
Audio±Vcc
Audio±Vcc
Audio±GND
Audio±GND
LowB+11V
LowB+11V
GND
GND
TUNER+32V
TO SIGNAL/CONVER
PD0073(P813)
R101
2R18K
P803
9P±2.5mm
SVM+11V
GND
NC
SVM+120V
TO SVM
PD0080(P706B)
P704
4P±2.5mm
+16V 2-A2
7V
MainB 2-C2
GND
HV_DET_OUT 2-C2
V&CONV.-16V
V&CONV.-16V
CONV.-32V
GND
CONV.+32V
GND
PROTECT
GND
GND
ACP
+5V-1
POWER
GND
GND
LowB+7V
LowB+7V
TO SIGNAL/CONVER
PD0073(BB10)
BB11
BB16P
① ②
10 us
100 V
Q801⑭
10 us
100 V
T862⑤
1
3

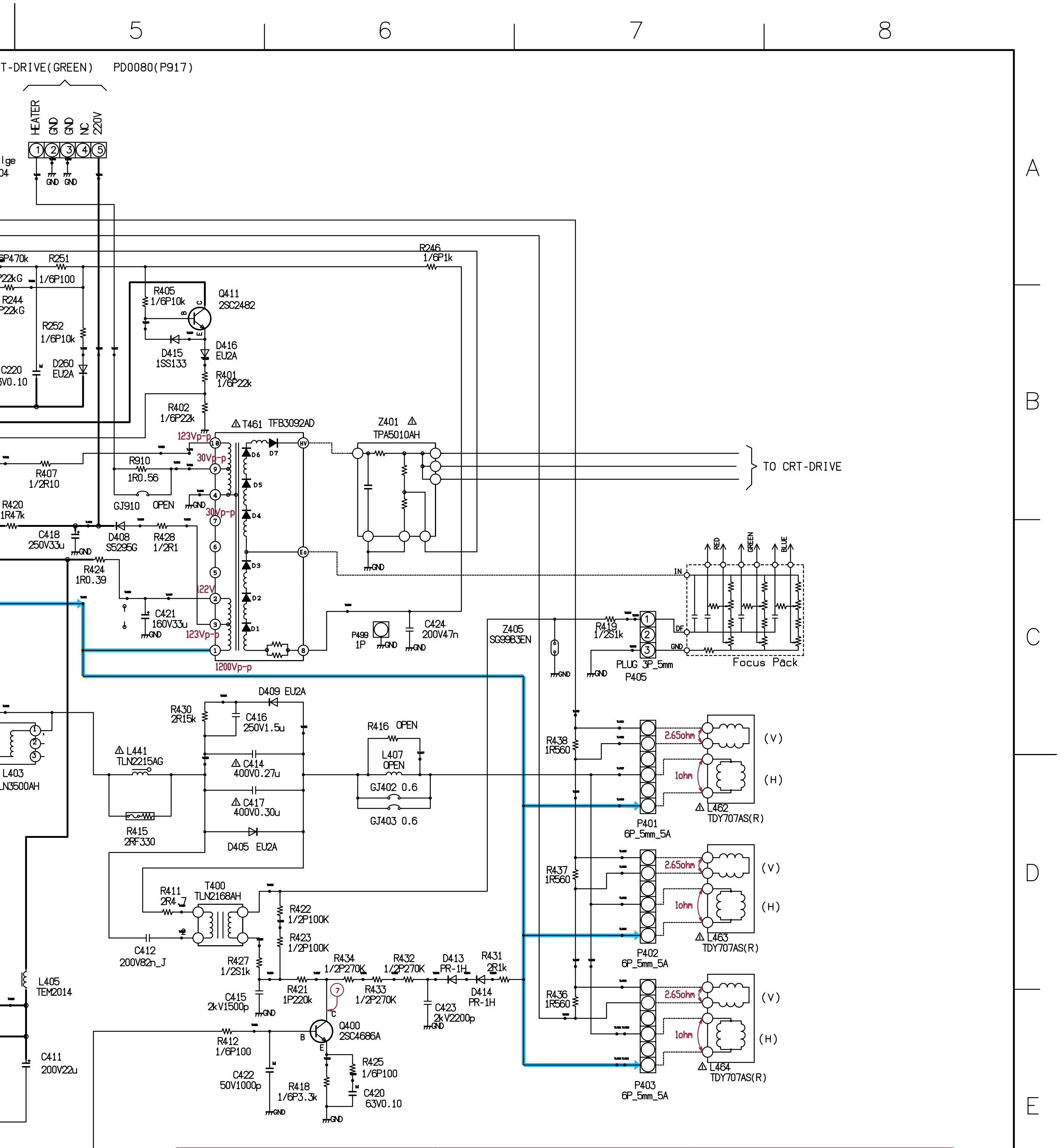
POWER/DEF(POWER)

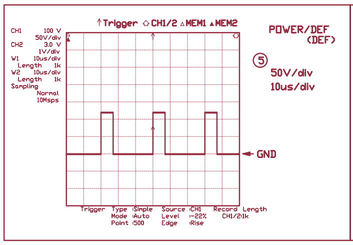
65HDX82 Series
[SHEET-1/2]

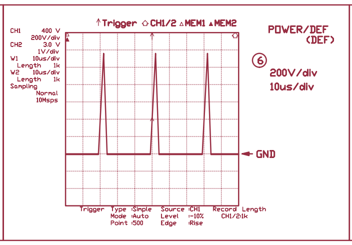

TO SIGNAL/CONVER PD0073(BB10)
CONV GND
CONV GND
CONV GND
CONV GND
16V
16V
CONV_ABL
ABLSW2
V_PARA
FREQ_SW
HV_COMP
V_NF
V_NF
V_OUT
V_OUT
DF_DRIVE
BB21
BB 16P SOCKET
TO SIGNAL/CONVER PD0073(BB10)
AFC
GND_DEF
12V
H_DRIVE
GND_DEF
ABL
HV_DET
HV_DET_OUT
BB31
8P 2.5PJ-P
TO CRT-DRIVE(GREEN) PD0080(P917)
HEATER
GND
GND
NC
220V
5P_2.5mm_1.5A_Beige
P404
1-B8
+16V
D411
EU2A
Q410 MC7812CT
Q410A
C434 25V1000u
C435 63V0.10
C436 63V0.10
C437 16V330u
R249 1/6P4.7k
Q221 2SC2482
R245 1/6P120k
R248 OPEN
C221 63V0.10
R250 1/6P4.7k
R247 1/6P470k
R251
R243 1/6P22kG
R244 1/6P22kG
R242 1/6P33kG
R241 1/6P15kG
C220 63V0.10
R252 1/6P10k
D260 EU2A
R246 1/6P1k
R405 1/6P10k
Q411 2SC2482
D415 1SS133
D416 EU2A
R401 1/6P22k
R402 1/6P22k
T461 TFB3092AD
Z401 TPA5010AH
TO CRT-DRIVE
7V
AFC_A 1-E6
1-E7 AFC_B
D401 EU2A
R406 1R2.2K
R413 1/6P2.7k
D402 EU2A
L401 56u
R417 1/6P100
C405 50V0.12u
R407 1/2R10
R420 1R47k
R910 1R0.56
GJ910 OPEN
C418 250V33u
D408 SS295G
R428 1/2R1
R424 1R0.39
C421 160V33u
1-C8 MainB
1-C8 V_DET_OUT
R404 2R100
R454 1/6P5.6k
R455 1/4RF27
T401 TLN1080AH
Q404 2SC5859
Q404A
Q403 KTC3198Y
C403 100V22u
C433 1800VH1200p
D404 ERC06-15L
C441 1800VH4700p
C407 1800V4700p
C401 500V3300p
Q402 KTA1266Y
Q401 2SK941
R452 1/6P10k
R414 1/6P100
D403 MTZJ18B
C402 500V390p
R403 1R100
Q405 2SC752GTM
R453 1/6P4.7k
D461 FMQ-3GU
D461A
L402 TEM2011Y
C432 630V8.2n
C408 630V8.2n
L403 TLN3500AH
C410 250V3.3u
R448 1/6P33k
C438 16V100u
R464 1/6P3.3k
R463 1/6P10k
R465 1/6P470k
R461 1/6P10k
R451 1/6P10k
C439 50V0.022u
R449 1/6P22k
Q406 BA10393
R462 1/6P2.2k
C426 50V0.015u
R440 1/6P10k
R442 1/6P10k
R443 1/6P5.6k
R439 1/6P10k
R459 1/6P3.9k
Q407 M5218AP
R457 1/6P22k
R466 1/2R330
R467 1/6P4.7k
Q409 KTC3198Y
C431 50V1000p
C427 50V0.012u
R435 1/6P100
R441 1/6P470k
R445 1/6P4.7k
C428 50V1000p
C429 50V0.033u
R444 1/6P5.6k
R446 1/6P10k
R447 1/6P1.5k
L404 TLN3351AD
R409 3R22
R410 3R22
C413 500V220p
L405 TEM2014
R456 1/6P220k
L406 TEM2014
D406 EU2A
C411 200V22u
R408 1/6P100
Q408 FET 2SK2920
D407 MTZJ18B
DF_DRV 1-E5 E7 DF_DRV
D409 EU2A
R430 2R15k
C416 250V1.5u
L441 TLN2215AG
C414 400V0.27u
C417 400V0.30u
R415 2RF330
D405 EU2A
R416 OPEN
L407 OPEN
GJ402 0.6
GJ403 0.6
R411 2R4.7
T400 TLN2168AH
R422 1/2P100K
R423 1/2P100K
C412 200V82n_J
R427 1/2S1k
R434 1/2P270K
R432 1/2P270K
D413 PR-1H
R431 2R1k
D414 PR-1H
R433 1/2P270K
R421 1P220k
C415 2kV1500p
C423 2kV2200p
Q400 2SC4686A
R412 1/6P100
C422 50V1000p
R418 1/6P3.3k
R425 1/6P100
C420 63V0.10
R499 1P
C424 200V47n
Z405 SG9983EN
R419 1/2S1k
PLUG 3P_5mm
P405
Focus Pack
RED
GREEN
BLUE
R438 1R560
R437 1R560
R436 1R560
2.65ohm
1ohm
(V)
(H)
L462 TDY707AS(R)
L463 TDY707AS(R)
L464 TDY707AS(R)
P401 6P_5mm_5A
P402 6P_5mm_5A
P403 6P_5mm_5A
123Vp-p
30Vp-p
122V
1200Vp-p
16V
12V
0V
84.6V
2.2ohm
0.1ohm
POWER/DEF (DEF)
① H_DRIVE 1V/div 10us/div
② 5V/div 10us/div
③ 5V/div 10us/div
④ 5V/div 5ms/div
⑤ 50V/div 10us/div
⑥ 200V/div 10us/div
⑦ 200V/div 5ms/div
GND
Trigger CH1/2 MEM1 MEM2

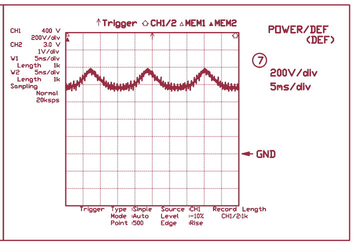
POWER/DEF(DEF)
65HDX82 Series
[SHEET-2/2]


1
2
3
4
A
B
C
D
E
F
TO SIGNAL/CONVER PD0073(BB10)
TO SIGNAL/CONVER PD0073(BB10)
TO CRT-DR
CONV GND
CONV GND
CONV GND
CONV GND
16V
16V
CONV_ABL
ABLSW2
V_PARA
FREQ_SW
HV_COMP
V_NF
V_NF
V_OUT
V_OUT
DF_DRIVE
BB21
BB 16P SOCKET
AFC
GND_DEF
12V
H_DRIVE
GND_DEF
ABL
HV_DET
HV_DET_OUT
BB31
8P 2.5PJ-P
5P_2.5mm_1.5A_Beige
P404
1-B8 +16V
D411 EU2A
Q410 MC7812CT
16V 12V 0V
Q410A
C434 25V1000u
C435 63V0.10
C436 63V0.10
C437 16V330u
Q221 2SC2482
R245 1/6P120k
ABL1_A
ABL_B
R247 1/6P470k
R243 1/6P22kG
R244 1/6P22kG
R249 1/6P4.7k
84.6V
R248 OPEN
C221 63V0.10
R250 1/6P4.7k
R242 1/6P33kG
R241 1/6P15kG
C220 63V0.10
7V
AFC_A 1-E6
1-E7 AFC_B
D401 EU2A
L401 56u
C405 50V0.12u
R406 1R2.2K
R417 1/6P100
D402 EU2A
R413 1/6P2.7k
R420 1R47k
1-C8 MainB
1-C8 HV DET OUT
R404 2R100
Q404 2SC5859
T401 TLN1080AH
R454 1/6P5.6k
R455 1/4RF27
2.2ohm
0.1ohm
Q404A
Q403 KTC3198Y
C403 100V22u
C433 1800VH1200p
D404 ERC06-15L
C441 1800VH4700p
C407 1800V4700p
C401 500V3300p
Q402 KTA1266Y
Q401 2SK941
R452 1/6P10k
R414 1/6P100
C402 500V390p
D461 FMQ-36U
D461A
Q405 2SC752GTM
D403 MTZJ18B
R403 1R100
L402 TEM2011Y
C432 630V8.2n
C408 630V8.2n
C410 250V3.3u
L403 TLN3500
R453 1/6P4.7k
R448 1/6P33k
C438 16V100u
R464 1/6P3.3k
R463 1/6P10k
R440 1/6P10k
R442 1/6P10k
C429 50V0.033u
R446 1/6P10k
R465 1/6P470k
R439 1/6P10k
R443 1/6P5.6k
R444 1/6P5.6k
R447 1/6P1.5k
L404 TLN3351AD
R451 1/6P10k
C439 50V0.022u
R461 1/6P10k
R462 1/6P2.2k
C426 50V0.015u
R410 3R22
R409 3R22
C413 500V220p
R449 1/6P22k
Q406 BA10393
Vee
Vcc
R457 1/6P22k
R459 1/6P3.9k
Q407 M5218AP
R456 1/6P220k
L406 TEM2014
D406 EU2A
R466 1/2R330
R467 1/6P4.7k
C427 50V0.012u
R441 1/6P470k
R445 1/6P4.7k
C428 50V1000p
R408 1/6P100
Q408 FET 2SK2920
Q409 KTC3198Y
C431 50V1000p
R435 1/6P100
D407 MTZJ18B
DF_DRV 1-E7 DF_DRV
POWER/DEF (DEF)
① H_DRIVE 1V/div 10us/div
② 5V/div 10us/div
③ 5V/div 10us/div
④ 5V/div 5ms/div
GND


5
6
7
8
A
B
C
D
E
T-DRIVE(GREEN)
PD0080(P917)
HEATER
GND
GND
NC
220V
GND GND
R251
1/6P100
P470k
22kG
R244
P22kG
R252
1/6P10k
C220
D260
EU2A
R246
1/6P1k
R405
1/6P10k
Q411
2SC2482
D416
EU2A
D415
1SS133
R401
1/6P22k
R402
1/6P22k
T461 TFB3092AD
Z401
TPA5010AH
123Vp-p
30Vp-p
30Vp-p
122V
123Vp-p
1200Vp-p
HV
D1
D2
D3
D4
D5
D6
D7
R910
1R0.56
R407
1/2R10
GJ910 OPEN
R420
1R47k
C418
250V33u
D408
S5295G
R428
1/2R1
R424
1R0.39
C421
160V33u
TO CRT-DRIVE
RED
GREEN
BLUE
IN
DF
GND
Focus Pack
P499
1P
C424
200V47n
Z405
SG99B3EN
R419
1/2S1k
PLUG 3P_5mm
P405
D409 EU2A
R430
2R15k
C416
250V1.5u
L441
TLN2215AG
C414
400V0.27u
C417
400V0.30u
R415
2RF330
D405 EU2A
L403
N3500AH
R416 OPEN
L407
OPEN
GJ402 0.6
GJ403 0.6
R438
1R560
2.65ohm
1ohm
(V)
(H)
L462
TDY707AS(R)
P401
6P_5mm_5A
R437
1R560
L463
TDY707AS(R)
P402
6P_5mm_5A
R436
1R560
L464
TDY707AS(R)
P403
6P_5mm_5A
T400
TLN2168AH
R411
2R4.7
R422
1/2P100K
R423
1/2P100K
C412
200V82n_J
R427
1/2S1k
R434
1/2P270K
R432
1/2P270K
D413
PR-1H
R431
2R1k
R421
1P220k
R433
1/2P270K
D414
PR-1H
C423
2kV2200p
C415
2kV1500p
L405
TEM2014
Q400
2SC4686A
R412
1/6P100
C411
200V22u
C422
50V1000p
R418
1/6P3.3k
R425
1/6P100
C420
63V0.10
_DRV







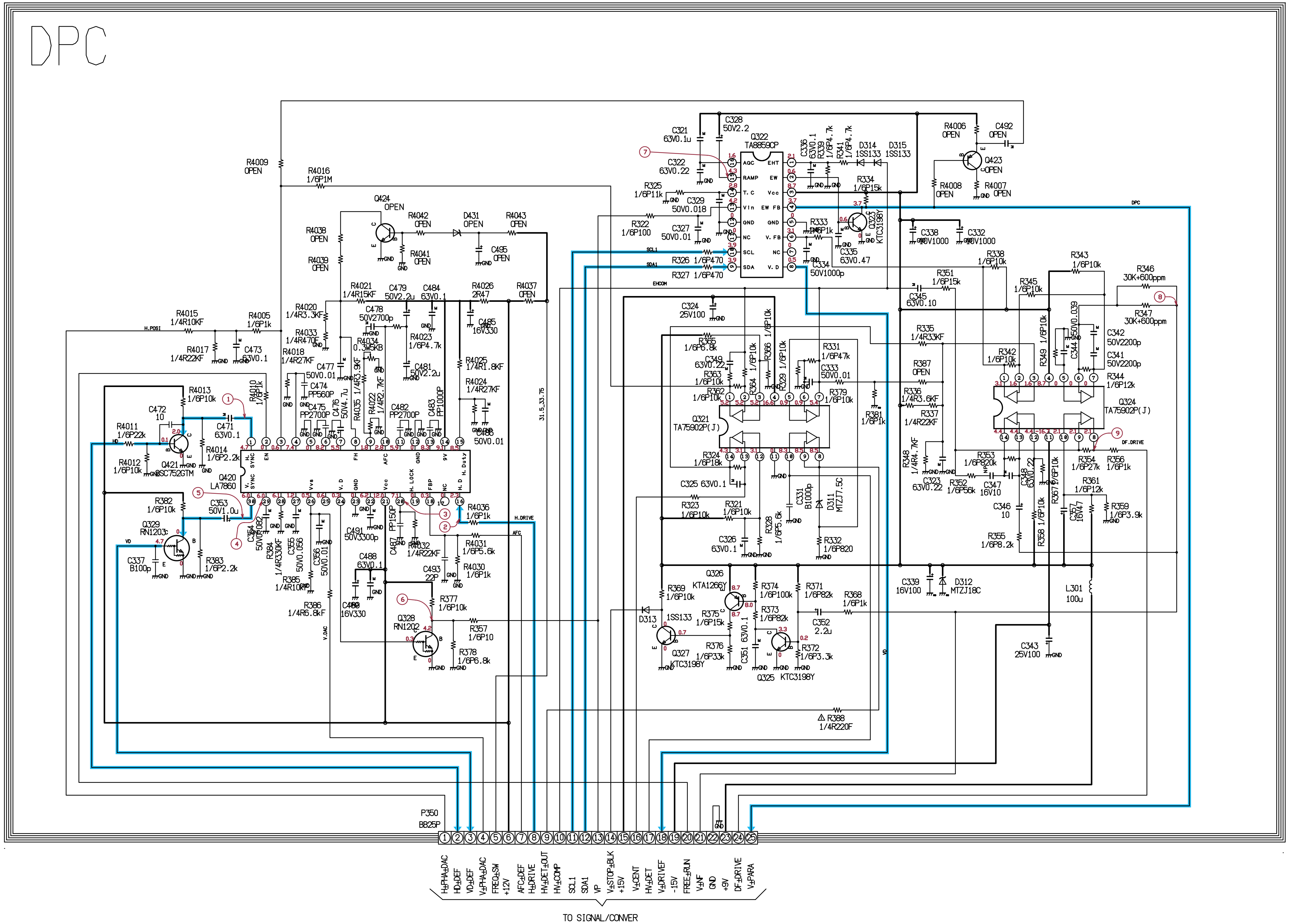
F

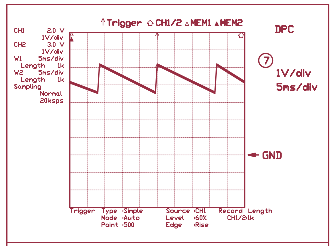
POWER/DEF(DEF)

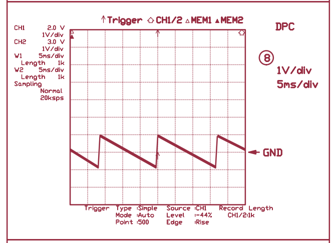
65HDX82 Series

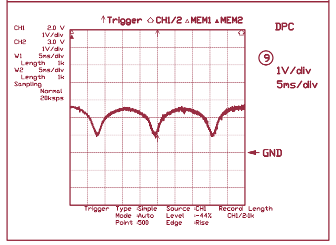
[SHEET-2/2]

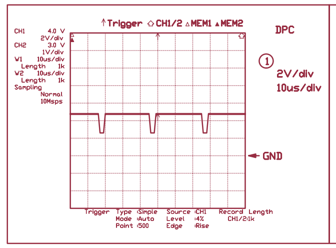
5 6 7 8

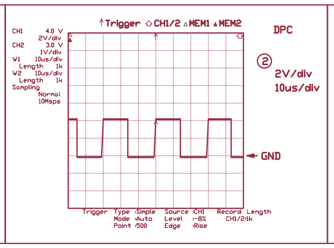

DPC
P350
BB25P
H-PHA-DAC
H-DEF
V-DEF
V-PHA-DAC
FREQ-SW
+12V
AFC-DEF
H-DRIVE
H-DET-OUT
H-COMP
SCL1
SDA1
VP
V-STOP-BLK
+15V
V-CENT
H-DET
V-DRIVE
-15V
FREE-RUN
V-HF
GND
+9V
DF-DRIVE
V-PARA
TO SIGNAL/CONVER
P0073(P410)
Q420
LA7860
Q322
TA8859CP
Q321
TA75902P(J)
Q324
TA75902P(J)
Q421
2SC752GTM
Q329
RN1203
Q328
RN1202
Q326
KTA1266Y
Q327
KTC3198Y
Q325
KTC3198Y
Q323
KTC3198Y
Q423
OPEN
Q424
OPEN
D313
1SS133
D314
1SS133
D315
1SS133
D311
MTZJ7.5C
D312
MTZJ18C
L301
100u
R388
1/4R220F

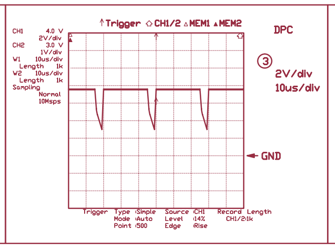


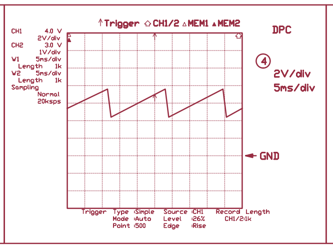


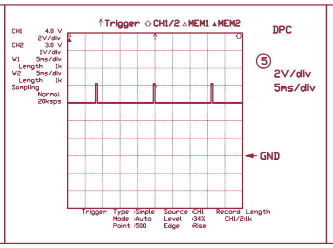


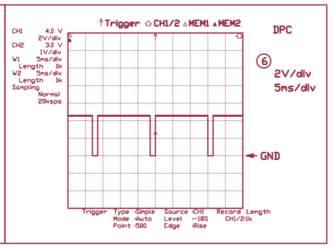




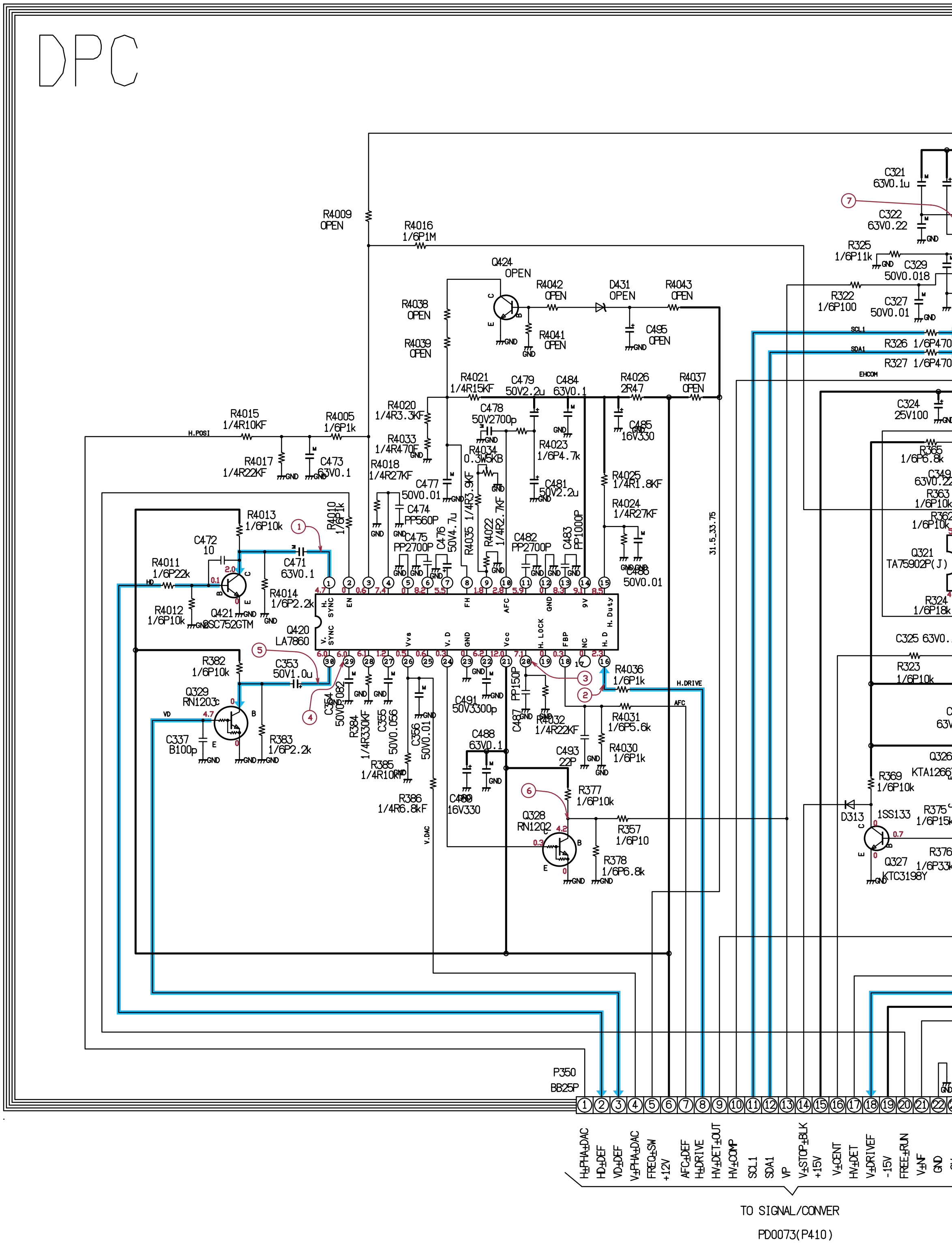




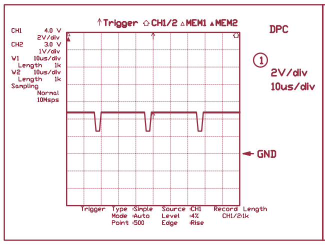




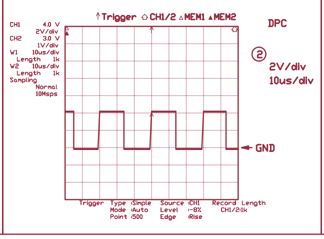
DPC
65HDX82 Series



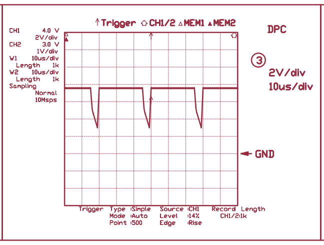
DPC
R4009 OPEN
R4016 1/6P1M
Q424 OPEN
R4042 OPEN
D431 OPEN
R4043 OPEN
R4038 OPEN
R4039 OPEN
R4041 OPEN
C495 OPEN
R4021 1/4R15KF
C479 50V2.2u
C484 63V0.1
R4026 2R47
R4037 OPEN
R4020 1/4R3.3KF
C478 50V2700p
R4034 0.3W5KB
R4023 1/6P4.7k
C485 16V330
R4033 1/4R470F
R4018 1/4R27KF
C477 50V0.01
C481 50V2.2u
R4025 1/4R1.8KF
R4024 1/4R27KF
C474 PP560P
C475 PP2700P
C476 50V4.7u
R4035 1/4R3.9KF
R4022 1/4R2.7KF
C482 PP2700P
C483 PP1000P
C486 50V0.01
R4015 1/4R10KF
R4005 1/6P1k
H.POSI
R4017 1/4R22KF
C473 63V0.1
R4013 1/6P10k
R4010 1/6P1k
C472 10
C471 63V0.1
R4011 1/6P22k
HD
R4014 1/6P2.2k
R4012 1/6P10k
Q421 2SC752GTM
Q420 LA7860
H. SYNC
EN
FH
AFC
GND
9V
H. Duty
V. SYNC
Vvs
V. D
GND
Vcc
H. LOCK
FBP
NC
H. D
R382 1/6P10k
C353 50V1.0u
Q329 RN1203
VD
C337 B100p
R383 1/6P2.2k
C354 50V0.082
R384 1/4R330KF
C355 50V0.056
R385 1/4R10KF
C356 50V0.01
R386 1/4R6.8kF
C491 50V3300p
C487 PP150P
R4032 1/4R22KF
R4036 1/6P1k
H.DRIVE
AFC
R4031 1/6P5.6k
R4030 1/6P1k
C488 63V0.1
C493 22P
C489 16V330
R377 1/6P10k
Q328 RN1202
R357 1/6P10
R378 1/6P6.8k
V.DAC
31.5,33.75
C321 63V0.1u
C322 63V0.22
R325 1/6P11k
C329 50V0.018
R322 1/6P100
C327 50V0.01
SCL1
SDA1
R326 1/6P470
R327 1/6P470
EHCOM
C324 25V100
R365 1/6P6.8k
C349 63V0.22
R363 1/6P10k
R362 1/6P10k
Q321 TA75902P(J)
R324 1/6P18k
C325 63V0.
R323 1/6P10k
Q326 KTA1266
R369 1/6P10k
D313 1SS133
R375 1/6P15k
R376 1/6P33k
Q327 KTC3198Y
P350 BB25P
H±PHA±DAC
HD±DEF
VD±DEF
V±PHA±DAC
FREQ±SW
+12V
AFC±DEF
H±DRIVE
HV±DET±OUT
HV±COMP
SCL1
SDA1
VP
V±STOP±BLK
+15V
V±CENT
HV±DET
V±DRIVEF
-15V
FREE±RUN
V±NF
GND
TO SIGNAL/CONVER
PD0073(P410)



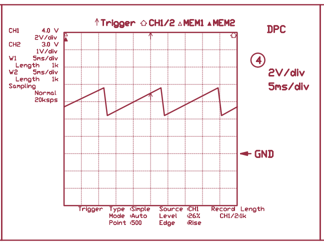
↑Trigger ◇CH1/2 △MEM1 ▲MEM2
DPC
①
2V/div
10us/div
GND



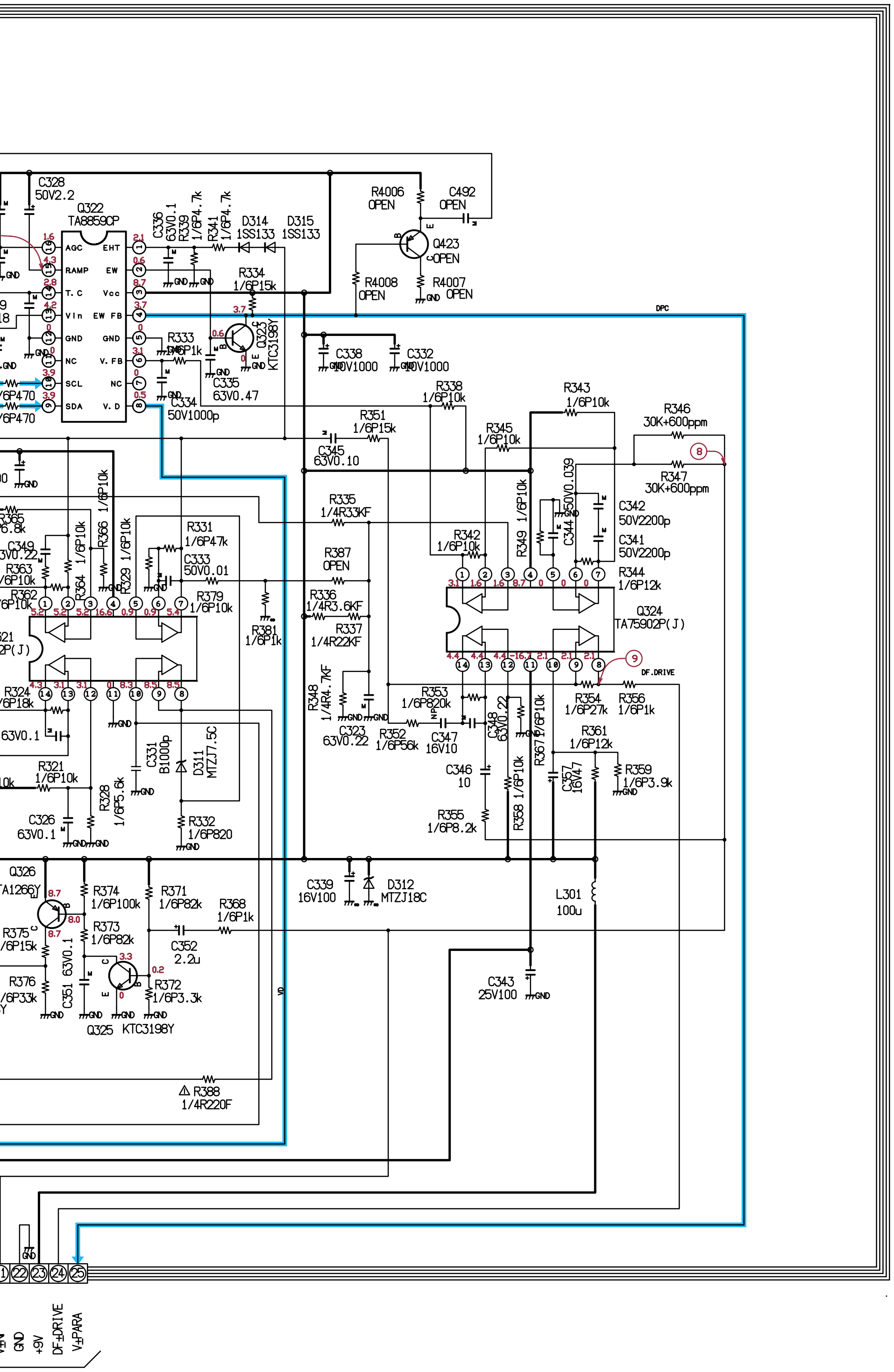
↑Trigger ◇CH1/2 △MEM1 ▲MEM2
DPC
②
2V/div
10us/div
GND



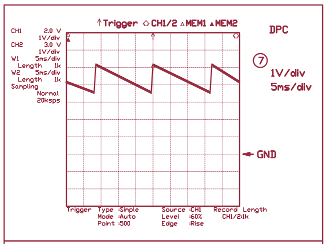
↑Trigger ◇CH1/2 △MEM1 ▲MEM2
DPC
③
2V/div
10us/div
GND

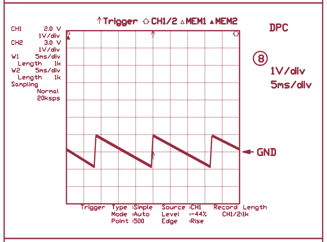


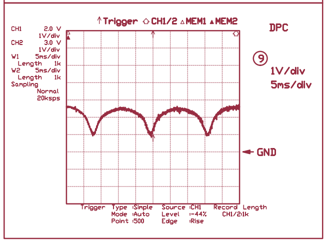
↑Trigger ◇CH1/2 △MEM1 ▲MEM2
DPC
④
2V/div
5ms/div
GND

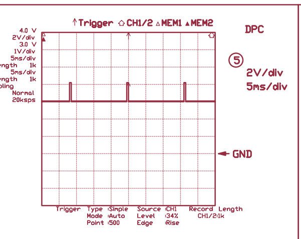

C328 50V2.2
Q322 TA8859CP
AGC EHT RAMP EW T.C Vcc VIn EW FB GND GND NC V.FB SCL NC SDA V.D
C336 63V0.1
R339 1/6P4.7k
R341 1/6P4.7k
D314 1SS133
D315 1SS133
R334 1/6P15k
R333 1/6P1k
Q323 KTC3198Y
C335 63V0.47
C334 50V1000p
R4006 OPEN
C492 OPEN
Q423 OPEN
R4008 OPEN
R4007 OPEN
C338 50V1000
C332 50V1000
DPC
R338 1/6P10k
R343 1/6P10k
R346 30K+600ppm
R351 1/6P15k
R345 1/6P10k
C345 63V0.10
R347 30K+600ppm
⑧
R335 1/4R33KF
C342 50V2200p
C344 50V0.039
C341 50V2200p
R342 1/6P10k
R349 1/6P10k
R387 OPEN
R344 1/6P12k
R336 1/4R3.6KF
R337 1/4R22KF
Q324 TA75902P(J)
⑨ DF.DRIVE
R331 1/6P47k
C333 50V0.01
R379 1/6P10k
R381 1/6P1k
R329 1/6P10k
R364 1/6P10k
R366 1/6P10k
C349 63V0.22
R363 1/6P10k
R362 1/6P10k
R365 1/6P6.8k
R324 1/6P18k
63V0.1
R321 1/6P10k
C331 B1000p
D311 MTZJ7.5C
R328 1/6P5.6k
C326 63V0.1
R332 1/6P820
R348 1/4R4.7KF
R353 1/6P820k
C323 63V0.22
R352 1/6P56k
C347 16V10
C348 63V0.22
R367 1/6P10k
R354 1/6P27k
R356 1/6P1k
R361 1/6P12k
C346 10
R358 1/6P10k
C357 16V47
R359 1/6P3.9k
R355 1/6P8.2k
Q326 TA1266Y
R374 1/6P100k
R371 1/6P82k
R368 1/6P1k
C339 16V100
D312 MTZJ18C
L301 100u
R375 1/6P15k
R373 1/6P82k
C352 2.2u
C351 63V0.1
R376 1/6P33k
R372 1/6P3.3k
Q325 KTC3198Y
C343 25V100
R388 1/4R220F
GND
21 22 23 24 25
GND +9V DF±DRIVE V±PARA

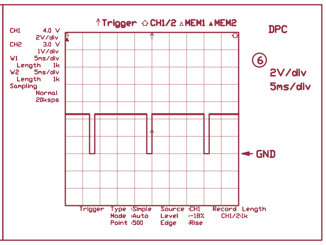
A B C D E F





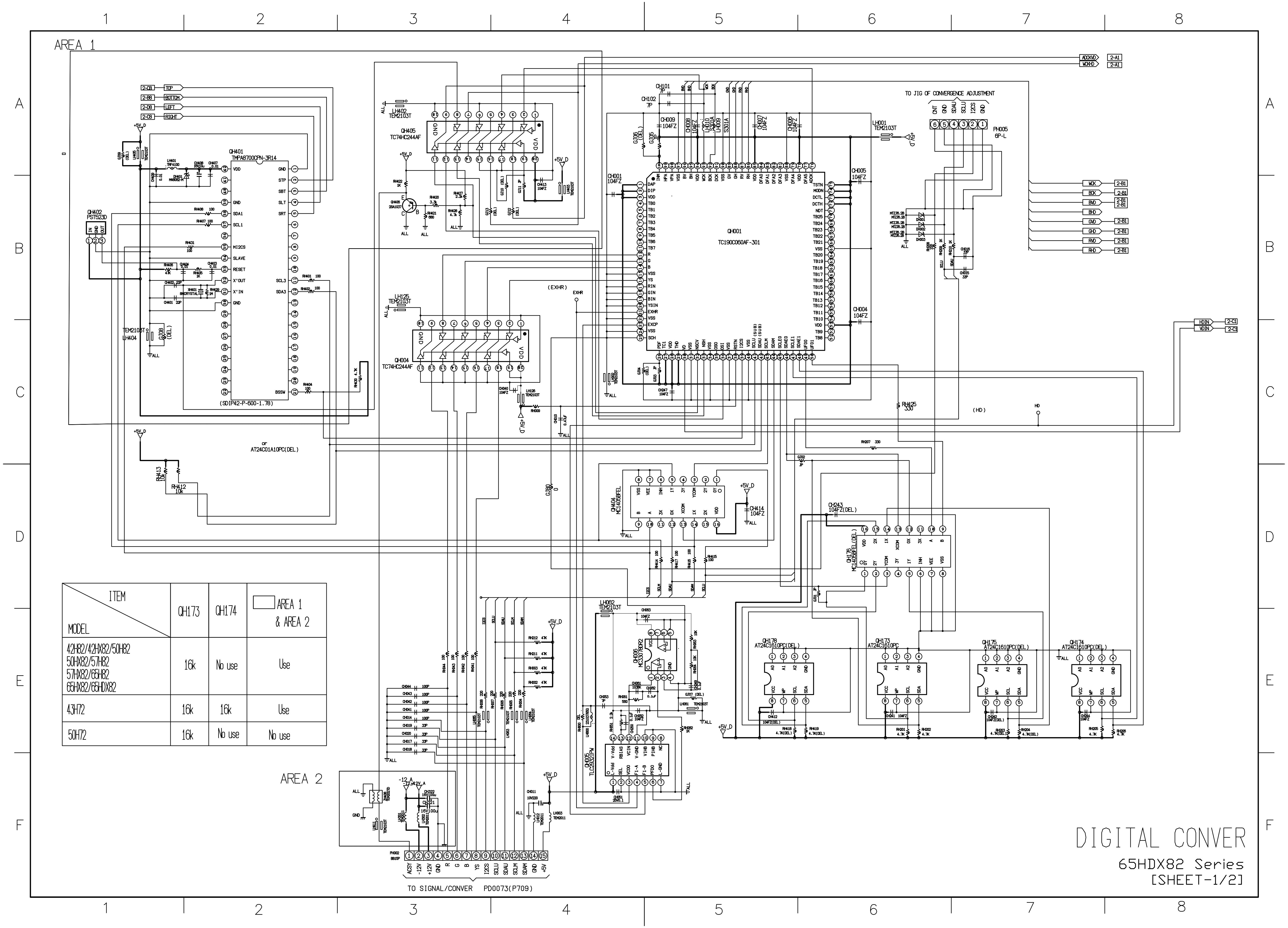






DPC

65HDX82 Series

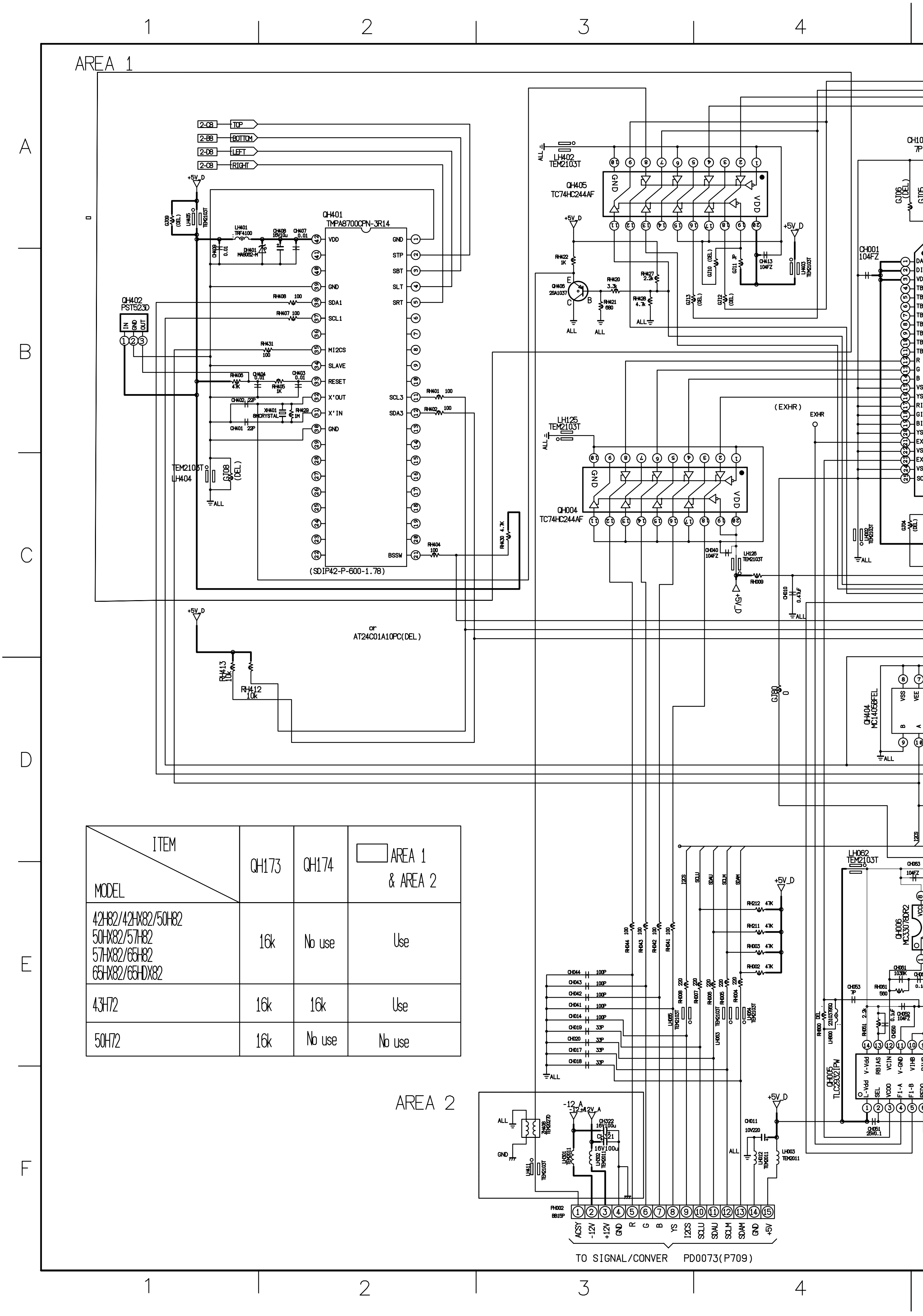

AREA 1
AREA 2
QH401 TMPA8700CPN-3R14
(SDIP42-P-600-1.78)
QH402 PST5230
QH405 TC74HC244AF
QH004 TC74HC244AF
QH001 TC190C060AF-301
QH404 MC14053BFEL
QH176 MC14053BFEL(DEL)
QH006 MC33078DR2
QH005 TLC2932IPW
QH178 AT24C1610PC(DEL)
QH173 AT24C1610PC
QH175 AT24C1610PC(DEL)
QH174 AT24C1610PC(DEL)
or AT24C01A10PC(DEL)
PH005 6P-L
TO JIG OF CONVERGENCE ADJUSTMENT
CNT GND SDAU SCLU I2CS GND
TOP BOTTOM LEFT RIGHT
ADCKVD ADCKHD
WCK BCK BHD GVD GHD RVD RHD
HDIN VDIN
(EXHR) EXHR
(HD) HD
+5V_D
ALL
PH002 BB15P
ACSY -12V +12V GND R G B YS I2CS SCLU SDAU SCLM SDAM GND +5V
TO SIGNAL/CONVER PD0073(P709)

ITEM / MODEL	QH173	QH174	AREA 1 & AREA 2
42H82/42HX82/50H82 50HX82/57H82 57HX82/65H82 65HX82/65HDX82	16k	No use	Use
43H72	16k	16k	Use
50H72	16k	No use	No use

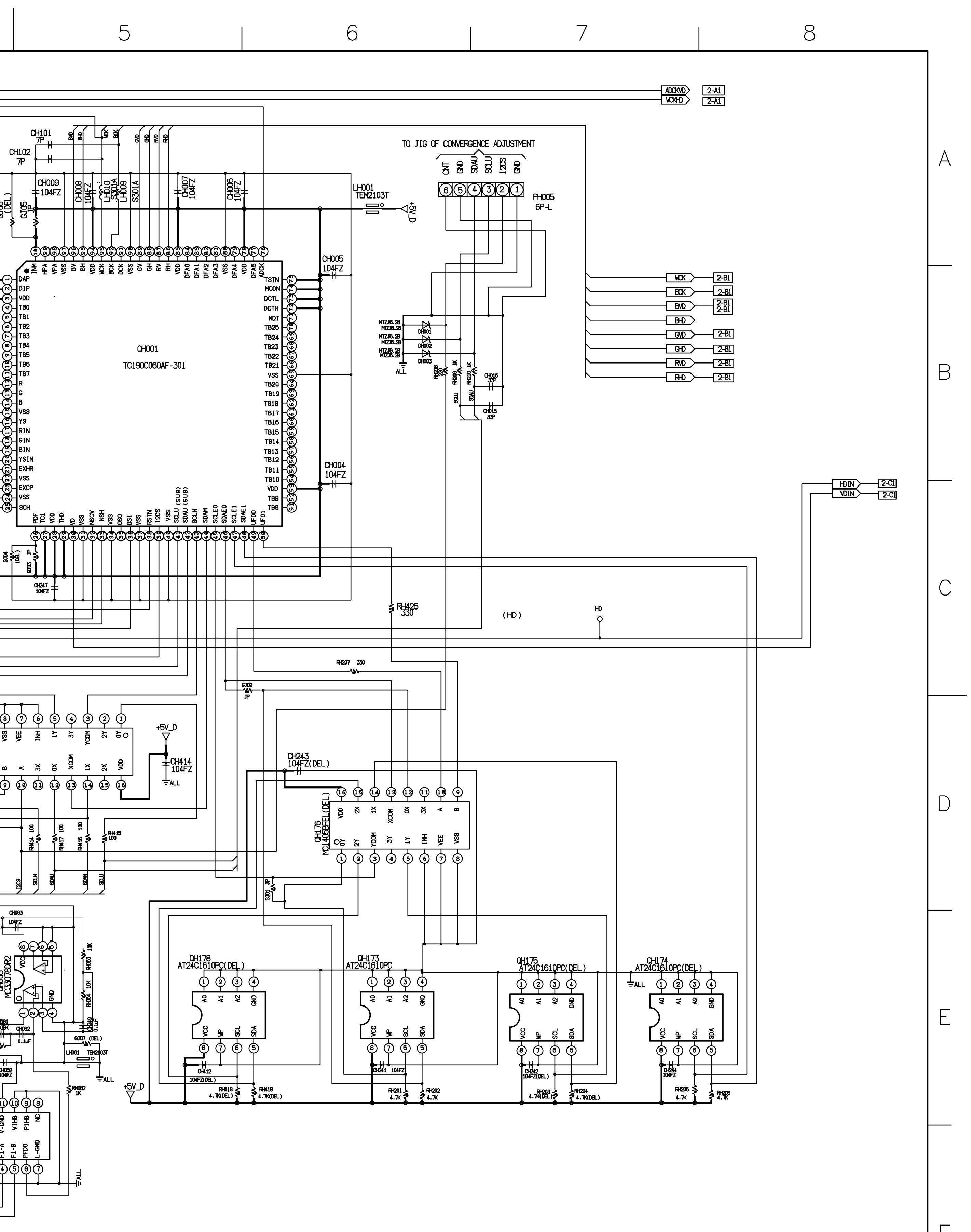
DIGITAL CONVER

65HDX82 Series

[SHEET-1/2]


1
2
3
4
A
B
C
D
E
F
AREA 1
AREA 2
2-C8 TOP
2-B8 BOTTOM
2-D8 LEFT
2-C8 RIGHT
+5V_D
QH401
TMPA8700CPN-3R14
VDD
GND
SDA1
SCL1
MI2CS
SLAVE
RESET
X'OUT
X'IN
STP
SBT
SLT
SRT
SCL3
SDA3
BSSW
(SDIP42-P-600-1.78)
LH401 TRF4100
DH401 MA8062-M
CH408 16V10u
CH407 0.01
CH409 0.01
RH408 100
RH407 100
RH431 100
RH406 47K
CH404 0.01
RH405 1K
CH403 0.01
CH402 22P
CH401 22P
X401 8MCRYSTAL
RH429 1M
RH401 100
RH402 100
RH404 100
RH430 4.7K
QH402
PST523D
IN
GND
OUT
GJ09 (DEL)
LH405 TEM2103T
TEM2103T
LH404
GJ08 (DEL)
ALL
or
AT24C01A10PC(DEL)
RH413 10k
RH412 10k
LH402 TEM2103T
QH405 TC74HC244AF
RH422 1K
QH406 2SA1037
RH420 3.3k
RH421 680
RH427 2.2k
RH428 4.7k
GJ10 (DEL)
GJ11 1P
CH413 104FZ
LH403 TEM2103T
GJ13 (DEL)
GJ12 (DEL)
GJ06 (DEL)
CH10
7P
CH001
104FZ
(EXHR)
EXHR
LH125 TEM2103T
QH004
TC74HC244AF
CH040 104FZ
LH126 TEM2103T
RH009
CH010 0.47uF
GJ04
LH002 TEM2103T
GJ80 0
QH404 MC14053BFEL
VSS
VEE
LH062 TEM2103T
CH063 104FZ
QH006 MC33078DR2
VCC
RH212 47K
RH211 47K
RH003 47K
RH002 47K
RH044 100
RH043 100
RH042 100
RH041 100
RH008 220
RH007 220
RH006 220
RH005 220
RH004 220
LH005 TEM2103T
LH003
LH004 TEM2103T
CH044 100P
CH043 100P
CH042 100P
CH041 100P
CH014 100P
CH019 33P
CH020 33P
CH017 33P
CH018 33P
I2CS
SCLU
SDAU
SCLM
SDAM
CH061 103BK
RH061 560
CH053 7P
RH051 2.2k
CH052 104FZ
QH005 TLC2932IPW
L-Vdd
SEL
VCOO
F1-A
F1-B
V-Vdd
RBIAS
VCIN
V-GND
VIHB
CH051 25V0.1
-12_A
+12V_A
CH322 16V100u
CH321 16V100u
LH301 TEM2011
LH302 TEM2011
ZH408 TEM2270
LH411 TEM2103T
GND
CH011 10V220
LH012 TEM2011
LH003 TEM2011
PH002
BB15P
ACSY
-12V
+12V
GND
R
G
B
YS
I2CS
SCLU
SDAU
SCLM
SDAM
GND
+5V
TO SIGNAL/CONVER PD0073(P709)

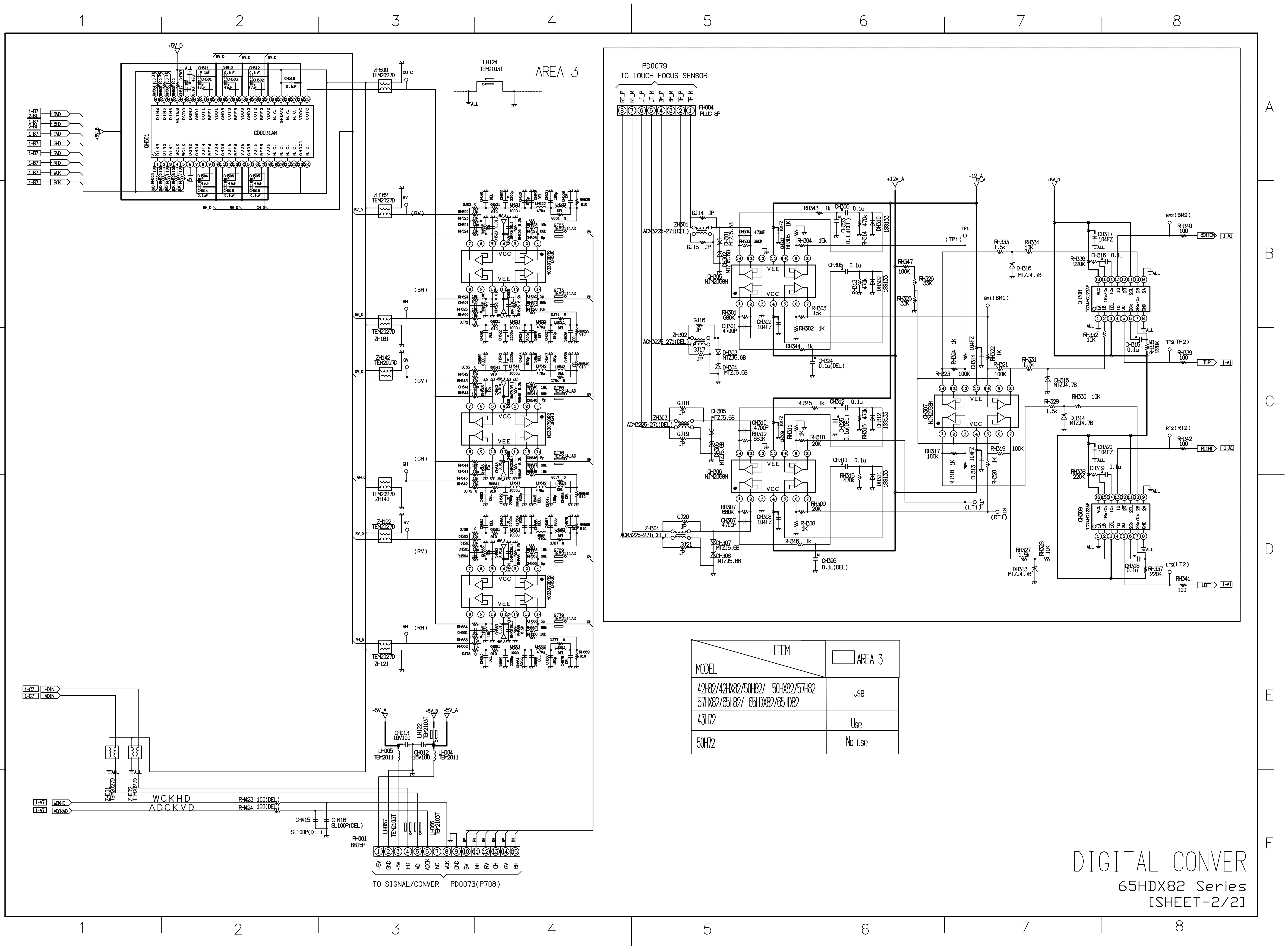
ITEM / MODEL	QH173	QH174	☐ AREA 1 & AREA 2
42H82/42HX82/50H82 50HX82/57H82 57HX82/65H82 65HX82/65HDX82	16k	No use	Use
43H72	16k	16k	Use
50H72	16k	No use	No use


5
6
7
8
A
B
C
D
E
F
ADCKVD
WCKHD
2-A1
2-A1
CH101
7P
CH102
7P
CH009
104FZ
CH008
104FZ
LH010
S301A
LH009
S301A
CH007
104FZ
CH006
104FZ
GJ05
JP
(DEL)
LH001
TEM2103T
+5V_D
TO JIG OF CONVERGENCE ADJUSTMENT
CNT
GND
SDAU
SCLU
I2CS
GND
PH005
6P-L
CH005
104FZ
QH001
TC190C060AF-301
INH
HPA
VPA
VSS
BV
BH
VDD
WCK
BCK
DCK
VSS
GV
GH
RV
RH
VDD
DFA0
DFA1
DFA2
DFA3
VSS
DFA4
VDD
DFA5
ADCK
DAP
DIP
VDD
TB0
TB1
TB2
TB3
TB4
TB5
TB6
TB7
R
G
B
VSS
YS
RIN
GIN
BIN
YSIN
EXHR
VSS
EXCP
VSS
SCH
TSTN
MODN
DCTL
DCTH
NDT
TB25
TB24
TB23
TB22
TB21
VSS
TB20
TB19
TB18
TB17
TB16
TB15
TB14
TB13
TB12
TB11
TB10
VDD
TB9
TB8
PDF
TCl
VDD
THD
VD
VSS
NSCV
NSH
VSS
OSO
OS1
VSS
RSTN
I2CS
VSS
SCLU (SUB)
SDAU (SUB)
SCLM
SDAM
SCLE0
SDAE0
SCLE1
SDAE1
UFO0
UFO1
CH004
104FZ
GJ04
(DEL)
GJ03
JP
CH247
104FZ
MTZJ6.2B
DH001
DH002
DH003
ALL
RH208 220
RH209 1K
RH210 1K
CH016 33P
CH015 33P
SCLU
SDAU
WCK
BCK
BVD
BHD
GVD
GHD
RVD
RHD
2-B1
HDIN
VDIN
2-C1
RH425
330
(HD)
HD
RH207 330
GJ02
JP
+5V_D
CH414
104FZ
ALL
VSS
VEE
INH
1Y
3Y
YCOM
2Y
0Y
B
A
3X
0X
XCOM
1X
2X
VDD
RH414 100
RH417 100
RH416 100
RH415 100
I2CS
SCLM
SDAU
SDAM
SCLU
CH243
104FZ(DEL)
QH176
MC14052BFEL(DEL)
GJ01 JP
CH063
104FZ
QH060
MC33078DR2
VCC
GND
RH063 10K
RH064 10K
CH069 0.1uF
CH062 0.1uF
GJ07 (DEL)
LH061 TEM2103T
CH052
104FZ
RH062 1K
QH178
AT24C1610PC(DEL)
QH173
AT24C1610PC
QH175
AT24C1610PC(DEL)
QH174
AT24C1610PC(DEL)
A0
A1
A2
GND
VCC
WP
SCL
SDA
CH412
104FZ(DEL)
CH241 104FZ
CH242
104FZ(DEL)
CH244
104FZ
RH418 4.7K(DEL)
RH419 4.7K(DEL)
RH201 4.7K
RH202 4.7K
RH203 4.7K(DEL)
RH204 4.7K(DEL)
RH205 4.7K
RH206 4.7K
V-GND
VIHB
PIHB
NC
F1-A
F1-B
PFDO
L-GND
ALL

DIGITAL CONVER

65HDX82 Series

[SHEET-1/2]

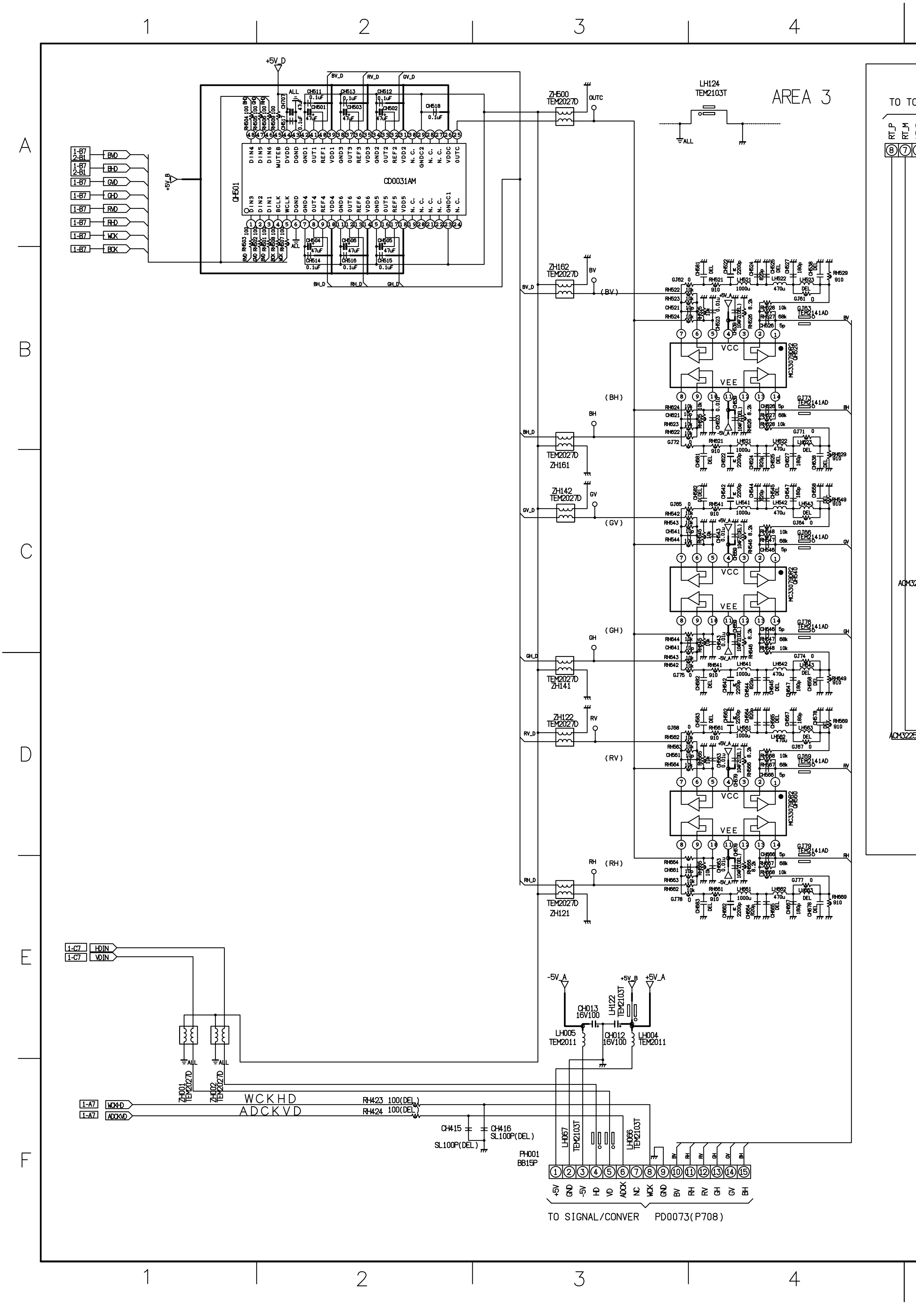

AREA 3
QH501
CD0031AM
+5V_D
+5V_B
BV_D
RV_D
GV_D
BH_D
RH_D
GH_D
BVD
BHD
GVD
GHD
RVD
RHD
WCK
BCK
1-B7
ZH500 TEM2027D
OUTC
LH124 TEM2103T
ZH162 TEM2027D
BV
(BV)
ZH161 TEM2027D
BH
(BH)
ZH142 TEM2027D
GV
(GV)
ZH141 TEM2027D
GH
(GH)
ZH122 TEM2027D
RV
(RV)
ZH121 TEM2027D
RH
(RH)
MC33078DR2
VCC
VEE
1-C7
HDIN
VDIN
ZH301 TEM2027D
ZH302 TEM2027D
1-A7
WCKHD
ADCKVD
RH423 100(DEL)
RH424 100(DEL)
CH415 SL100P(DEL)
CH416 SL100P(DEL)
-5V_A
+5V_B
+5V_A
CH013 16V100
LH122 TEM2103T
LH005 TEM2011
CH012 16V100
LH004 TEM2011
LH067 TEM2103T
LH066 TEM2103T
PH001 BB15P
+5V GND -5V HD VD ADCK NC WCK GND BV RH RV GH GV BH
TO SIGNAL/CONVER PD0073(P708)
PD0079
TO TOUCH FOCUS SENSOR
RT_P RT_M LT_P LT_M BM_P BM_M TP_P TP_M
PH004 PLUG 8P
+12V_A
-12_A
+5V_D
ACM3225-271(DEL)
ZH301
ZH302
ZH303
ZH304
QH305 NJM2058M
QH306 NJM2058M
QH307 NJM2058M
QH308 TC74HC123AF
QH309 TC74HC123AF
1SS133
MTZJ5.6B
MTZJ4.7B
(TP1)
TP1
BM1(BM1)
BM2(BM2)
TP2(TP2)
RT2(RT2)
LT2(LT2)
(LT1)
(RT1)
RH340 100 BOTTOM 1-A1
RH339 100 TOP 1-A1
RH342 100 RIGHT 1-A1
RH341 100 LEFT 1-A1
1 2 3 4 5 6 7 8
A B C D E F

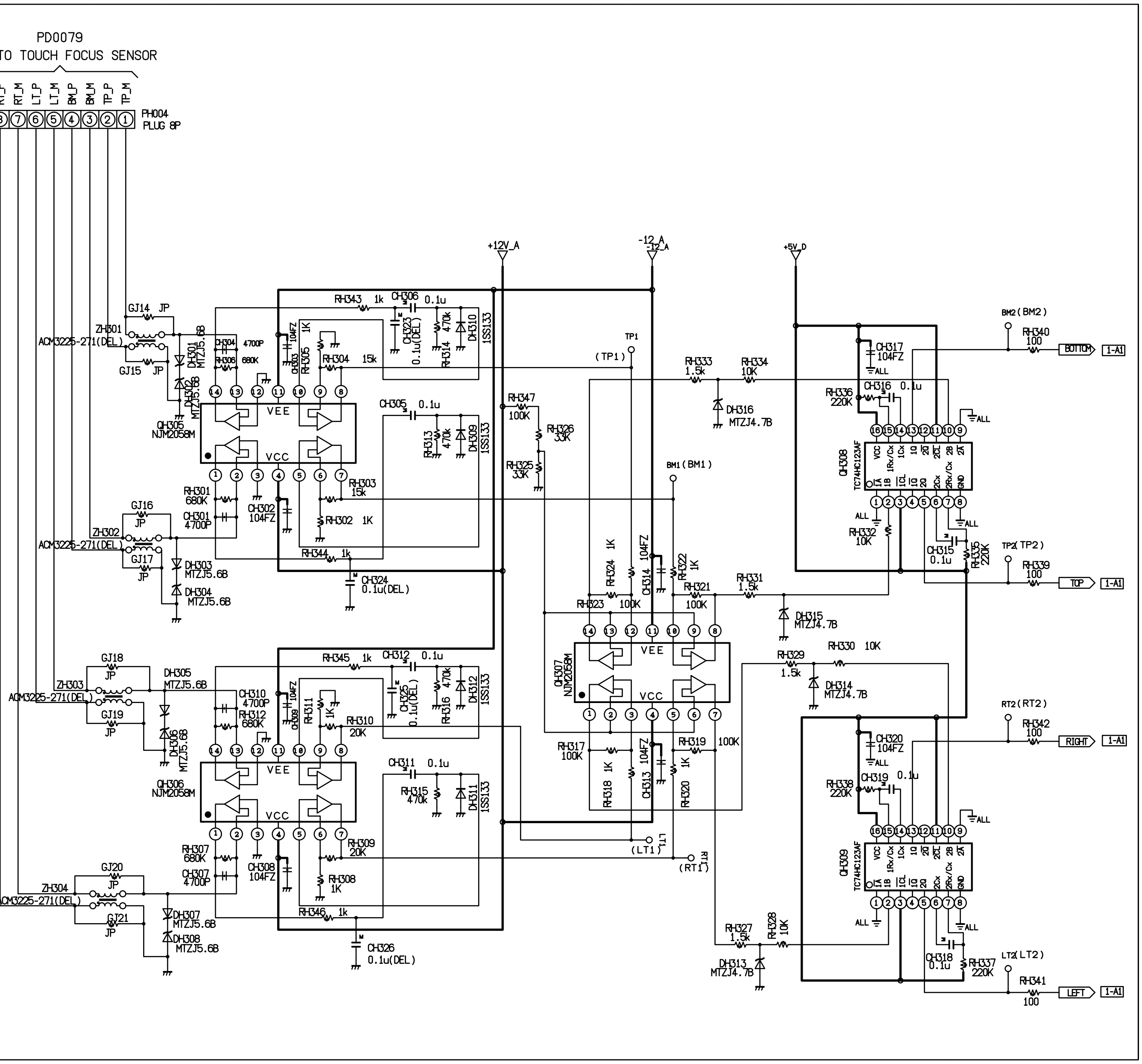
ITEM MODEL	AREA 3
42H82/42HX82/50H82/ 50HX82/57H82 57HX82/65H82/ 65HDX82/65HD82	Use
43H72	Use
50H72	No use

DIGITAL CONVER

65HDX82 Series

[SHEET-2/2]


AREA 3
1
2
3
4
A
B
C
D
E
F
+5V_D
BV_D
RV_D
GV_D
ALL
CH511 0.1uF
CH513 0.1uF
CH512 0.1uF
CH501 47uF
CH503 47uF
CH502 47uF
CH518 0.1uF
CH707
CD0031AM
QH501
DIN4 DIN5 DIN6 MUTEB DVDD DGND GND1 OUT1 REF1 VDD1 GND3 OUT3 REF3 VDD3 GND2 OUT2 REF2 VDD2 N.C. GNDC2 N.C. N.C. VDDC OUTC
DIN3 DIN2 DIN1 BCLK WCLK GND4 OUT4 REF4 VDD4 GND6 OUT6 REF6 VDD6 GND5 OUT5 REF5 VDD5 N.C. N.C. N.C. N.C. GNDC1 N.C.
RH504 100
RH503 100
CH504 47uF
CH506 47uF
CH505 47uF
CH514 0.1uF
CH516 0.1uF
CH515 0.1uF
BH_D
RH_D
GH_D
+5V_B
1-B7 2-B1 BVD
1-B7 2-B1 BHD
1-B7 GVD
1-B7 GHD
1-B7 RVD
1-B7 RHD
1-B7 WCK
1-B7 BCK
ZH500 TEM2027D
OUTC
LH124 TEM2103T
ALL
TO TC
RT_P
RT_M
ZH162 TEM2027D
BV
(BV)
TEM2027D ZH161
BH
(BH)
ZH142 TEM2027D
GV
(GV)
TEM2027D ZH141
GH
(GH)
ZH122 TEM2027D
RV
(RV)
TEM2027D ZH121
RH
(RH)
VCC
VEE
MC33078D62 QH520
MC33078D62 QH540
MC33078D62 QH560
GJ63 TEM2141AD
GJ73 TEM2141AD
GJ66 TEM2141AD
GJ76 TEM2141AD
GJ69 TEM2141AD
GJ79 TEM2141AD
RH521 910
LH521 1000u
LH522 470u
RH529 910
RH549 910
RH569 910
RH669 910
ACM32
ACM3225
1-C7 HDIN
1-C7 VDIN
ZH001 TEM2027D
ZH002 TEM2027D
ALL
1-A7 WCKHD
1-A7 ADCKVD
WCKHD
ADCKVD
RH423 100(DEL)
RH424 100(DEL)
CH415 SL100P(DEL)
CH416 SL100P(DEL)
-5V_A
+5V_B
+5V_A
CH013 16V100
LH122 TEM2103T
LH005 TEM2011
CH012 16V100
LH004 TEM2011
LH067 TEM2103T
LH066 TEM2103T
PH001 BB15P
+5V GND -5V HD VD ADCK NC WCK GND BV RH RV GH GV BH
TO SIGNAL/CONVER PD0073(P708)

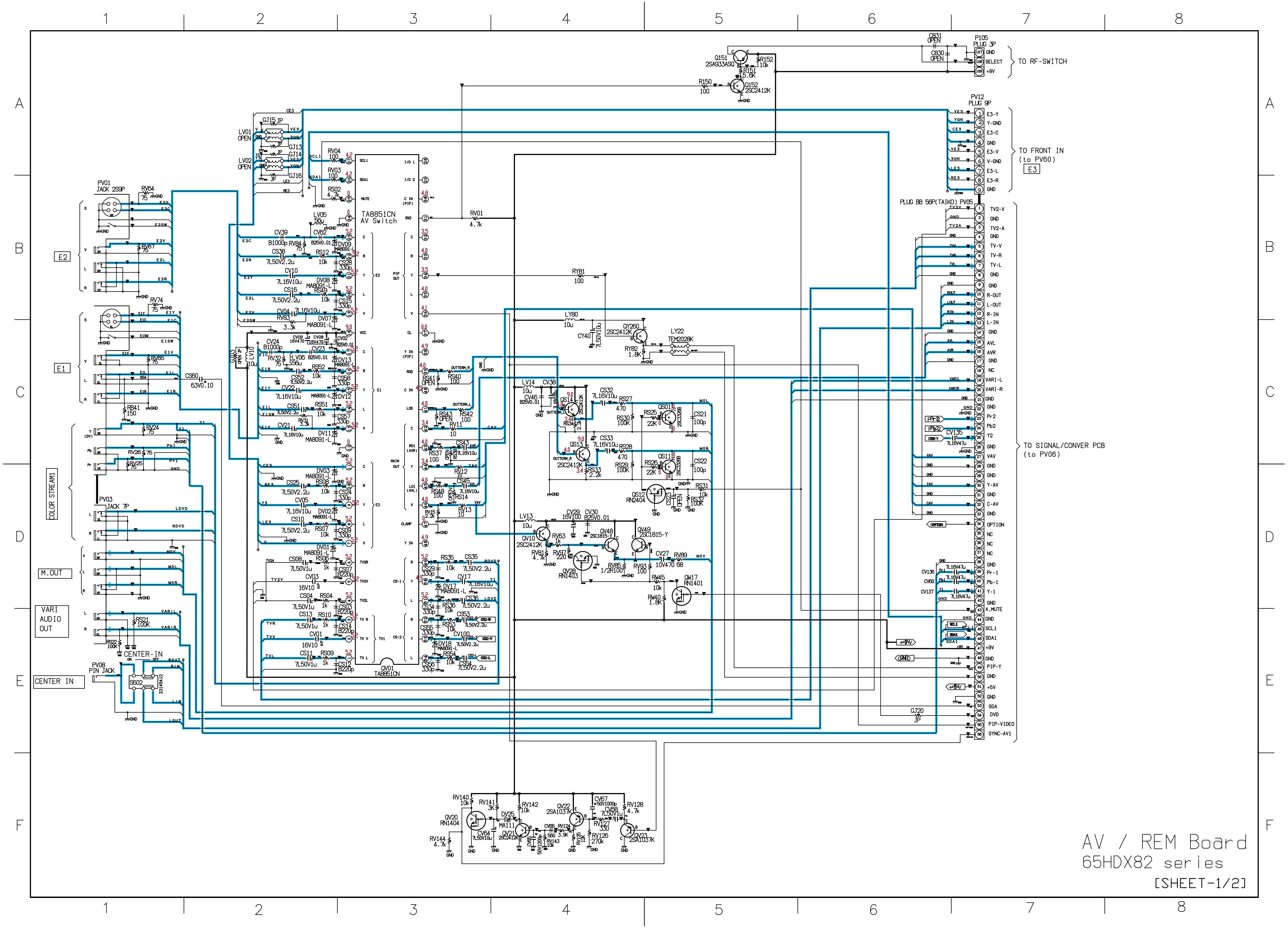

PD0079
TO TOUCH FOCUS SENSOR
RT_M
LT_P
LT_M
BM_P
BM_M
TP_P
TP_M
PH004
PLUG 8P
GJ14 JP
ZH301
ACM3225-271(DEL)
GJ15 JP
DH301 MTZJ5.6B
DH302 MTZJ5.6B
CH304 4700P
RH306 680K
RH343 1k
CH306 0.1u
CH303 104FZ
RH305 1K
CH323 0.1u(DEL)
RH314 470k
DH310 1SS133
RH304 15k
QH305 NJM2058M
VEE
VCC
CH305 0.1u
RH313 470k
DH309 1SS133
RH301 680K
CH301 4700P
CH302 104FZ
RH303 15k
RH302 1K
GJ16 JP
ZH302
ACM3225-271(DEL)
GJ17 JP
DH303 MTZJ5.6B
DH304 MTZJ5.6B
RH344 1k
CH324 0.1u(DEL)
+12V_A
-12_A
+5V_D
TP1
(TP1)
RH347 100K
RH326 33K
RH325 33K
RH333 1.5k
RH334 10K
DH316 MTZJ4.7B
BM1(BM1)
RH324 1K
CH314 104FZ
RH322 1K
RH323 100K
RH321 100K
RH331 1.5k
DH315 MTZJ4.7B
QH307 NJM2058M
RH329 1.5k
RH330 10K
DH314 MTZJ4.7B
RH317 100K
RH318 1K
CH313 104FZ
RH320 1K
RH319 100K
(LT1) LT1
(RT1) RT1
RH327 1.5k
RH328 10K
DH313 MTZJ4.7B
BM2(BM2)
RH340 100
BOTTOM
1-A1
CH317 104FZ
ALL
RH336 220K
CH316 0.1u
QH308 TC74HC123AF
VCC 1Rx/Cx 1Cx 1Q 2Q 2CL 2B 2A
1A 1B 1CL 1Q 2Q 2Cx 2Rx/Cx GND
RH332 10K
CH315 0.1u
RH335 220K
TP2(TP2)
RH339 100
TOP
RT2(RT2)
RH342 100
RIGHT
CH320 104FZ
RH338 220K
CH319 0.1u
QH309 TC74HC123AF
CH318 0.1u
RH337 220K
LT2(LT2)
RH341 100
LEFT
GJ18 JP
ZH303
ACM3225-271(DEL)
GJ19 JP
DH305 MTZJ5.6B
DH306 MTZJ5.6B
CH310 4700P
RH312 680K
CH309 104FZ
RH311 1K
RH345 1k
CH312 0.1u
CH325 0.1u(DEL)
RH316 470k
DH312 1SS133
RH310 20K
QH306 NJM2058M
CH311 0.1u
RH315 470k
DH311 1SS133
RH307 680K
CH307 4700P
CH308 104FZ
RH309 20K
RH308 1K
RH346 1k
CH326 0.1u(DEL)
ZH304
ACM3225-271(DEL)
GJ20 JP
GJ21 JP
DH307 MTZJ5.6B
DH308 MTZJ5.6B

ITEM MODEL	AREA 3
42H82/42HX82/50H82/ 50HX82/57H82 57HX82/65H82/ 65HDX82/65HD82	Use
43H72	Use
50H72	No use

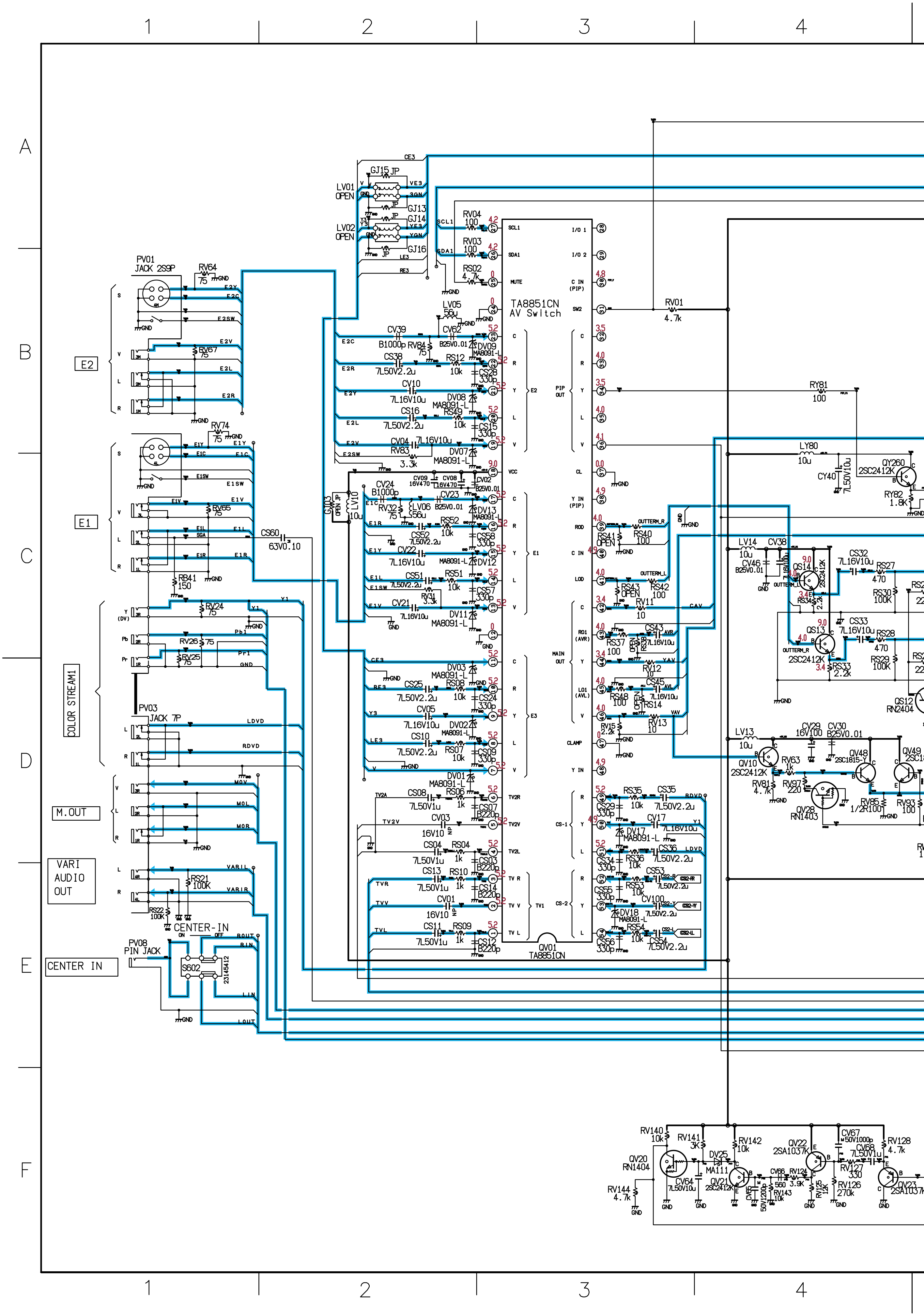
A
B
C
D
E
F

DIGITAL CONVER

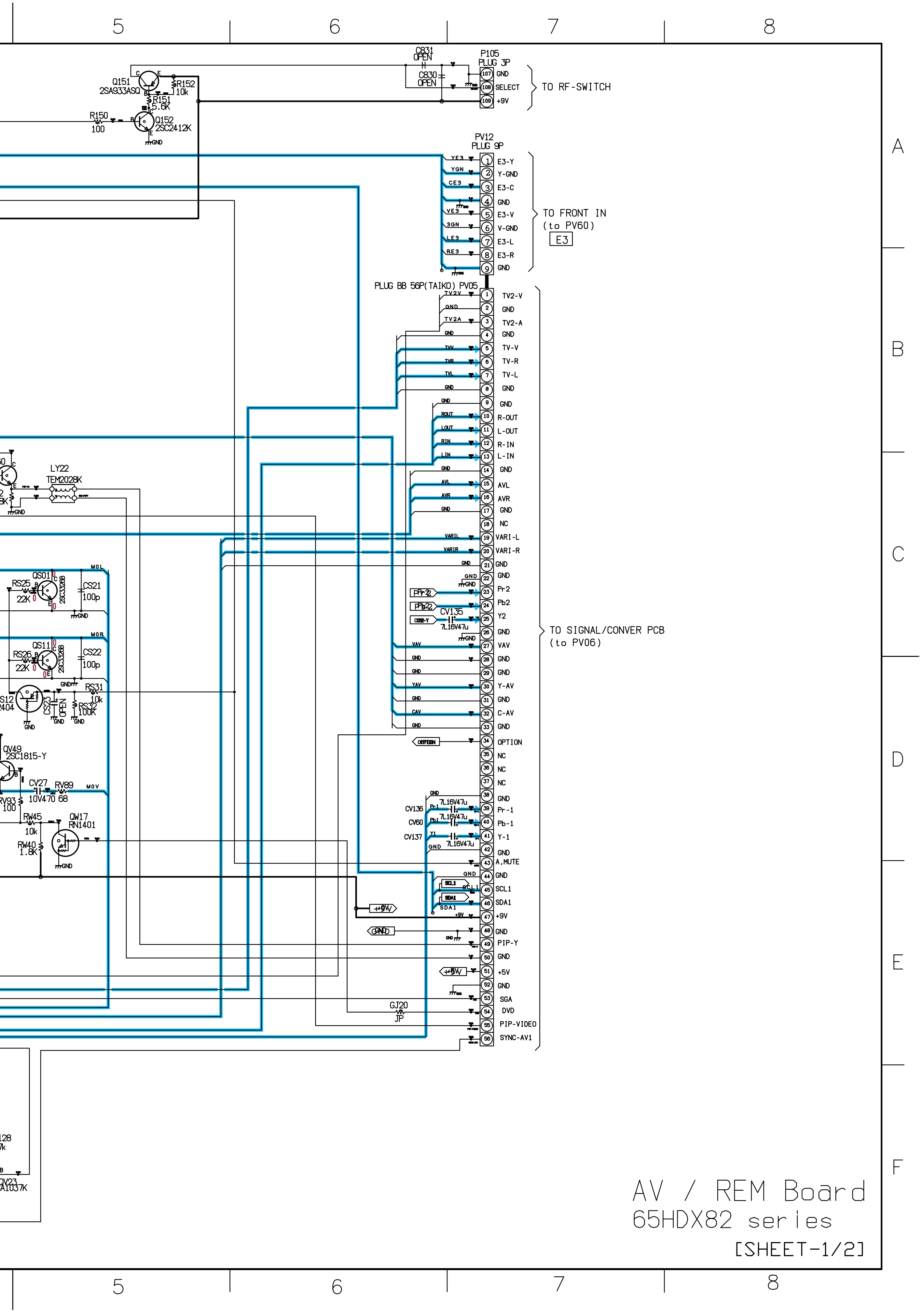
65HDX82 Series
[SHEET-2/2]


1
2
3
4
5
6
7
8
A
B
C
D
E
F
TA8851CN
AV Switch
QV01
TA8851CN
P105
PLUG 3P
TO RF-SWITCH
GND
SELECT
+9V
Q151
2SA933ASQ
R152
10k
R151
5.6K
R150
100
Q152
2SC2412K
C831
OPEN
C830
OPEN
PV12
PLUG 9P
E3-Y
Y-GND
E3-C
GND
E3-V
V-GND
E3-L
E3-R
GND
TO FRONT IN
(to PV60)
E3
PLUG BB 56P(TAIKO) PV05
TV2-V
GND
TV2-A
GND
TV-V
TV-R
TV-L
GND
GND
R-OUT
L-OUT
R-IN
L-IN
GND
AVL
AVR
GND
NC
VARI-L
VARI-R
GND
GND
Pr2
Pb2
Y2
GND
VAV
GND
GND
Y-AV
GND
C-AV
GND
OPTION
NC
NC
NC
GND
Pr-1
Pb-1
Y-1
GND
A.MUTE
GND
SCL1
SDA1
+9V
GND
PIP-Y
GND
+5V
GND
SGA
DVD
PIP-VIDEO
SYNC-AV1
TO SIGNAL/CONVER PCB
(to PV06)
PV01
JACK 2S9P
E2
E1
COLOR STREAM1
PV03
JACK 7P
M.OUT
VARI
AUDIO
OUT
CENTER IN
PV08
PIN JACK
CENTER-IN
S602
LV01
OPEN
LV02
OPEN
GJ15 JP
GJ13
GJ14
GJ16
RV04
100
RV03
100
RS02
4.7k
LV05
56u
RV01
4.7k
RY81
100
LY80
10u
CY40
QY260
2SC2412K
RY82
1.8K
LY22
TEM2028K
LV14
10u
CV38
CV46
QS14
2SC2412K
CS32
7L16V10u
RS27
470
QS01
RS25
22K
RS30
100K
CS21
100p
QS13
2SC2412K
CS33
7L16V10u
RS28
470
QS11
RS26
22K
RS29
100K
CS22
100p
QS12
RN2404
RS31
10k
RS32
100K
LV13
10u
CV29
16V100
CV30
B25V0.01
QV10
2SC2412K
RV63
1k
QV48
2SC1815-Y
QV49
2SC1815-Y
CV27
10V470
RV89
68
RV81
4.7k
RV97
220
QV26
RN1403
RV85
1/2R100
RV93
100
RV45
10k
RV40
1.8K
QW17
RN1401
CS60
63V0.10
RB41
150
RV64
75
RV67
75
RV74
75
RV66
75
RV24
75
RV26
75
RV25
75
RS21
100K
RS22
100K
GJ20
JP
RV140
10k
RV141
3K
RV142
10k
QV20
RN1404
DV25
MA111
CV64
7L50V10u
QV21
2SC2412K
QV22
2SA1037K
CV67
B50V1000p
CV68
7L50V1u
RV128
4.7k
RV124
3.9K
RV127
330
RV126
270k
QV23
2SA1037K
RV144
4.7k
RV143
+9V
+5V
GND

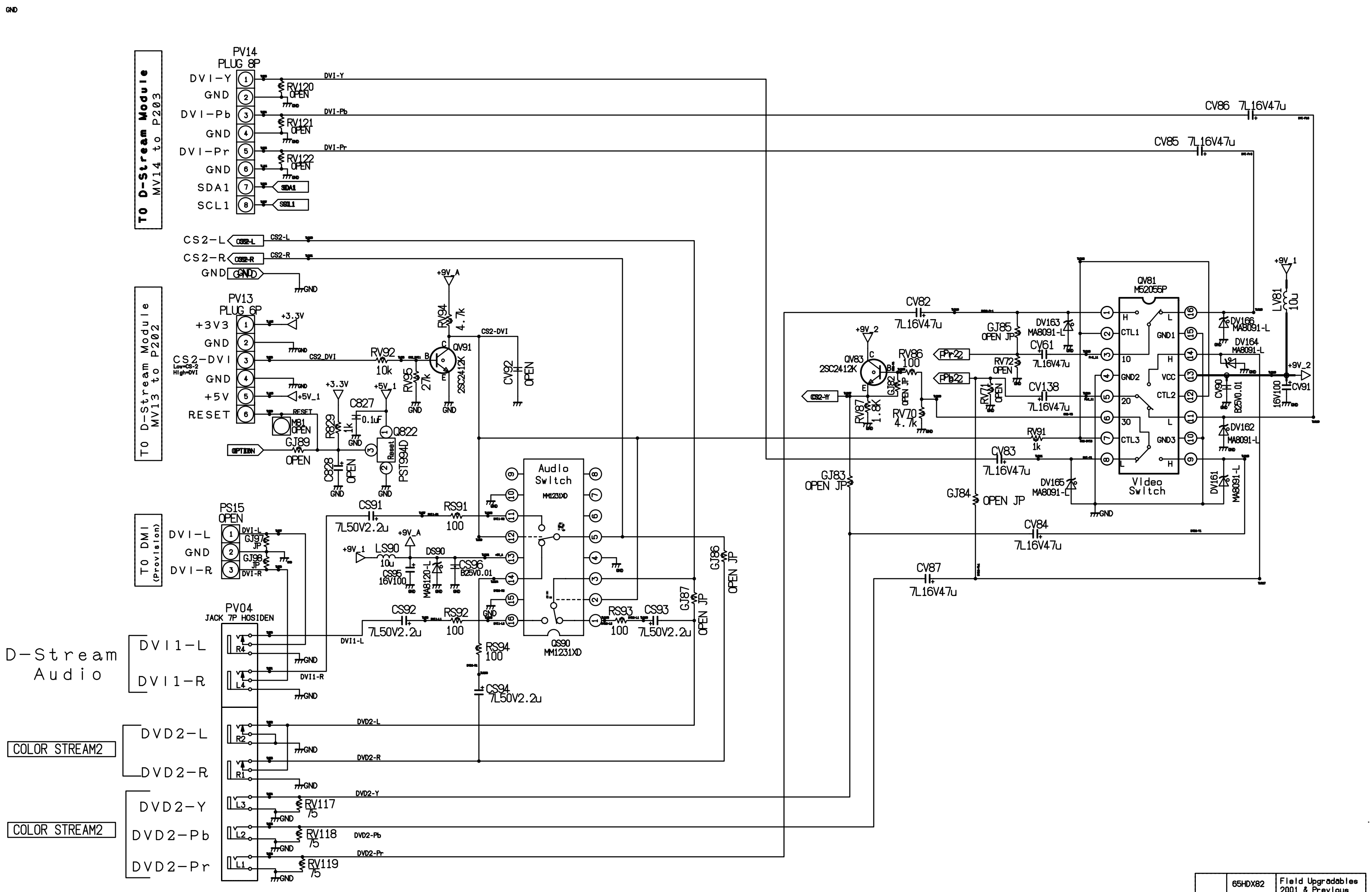
AV / REM Board
65HDX82 series
[SHEET-1/2]

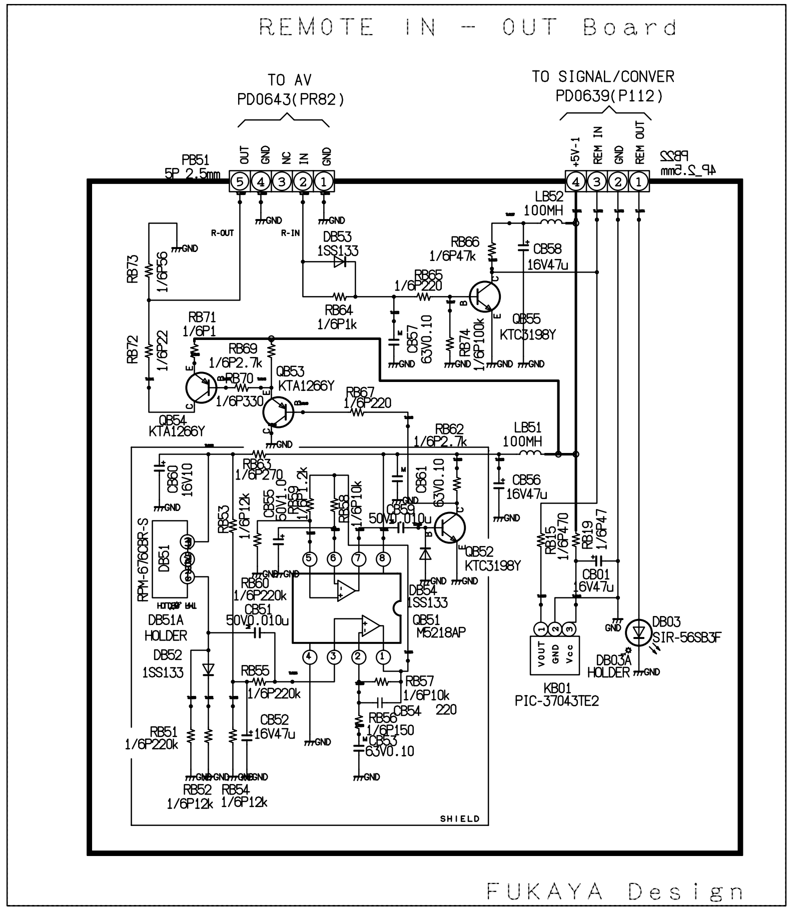


1
2
3
4
A
B
C
D
E
F
TA8851CN
AV Switch
QV01
TA8851CN
PV01
JACK 2S9P
E2
E1
COLOR STREAM1
PV03
JACK 7P
M.OUT
VARI
AUDIO
OUT
CENTER IN
PV08
PIN JACK
CENTER-IN
ON
OFF
S602
23145412
SCL1
SDA1
MUTE
VCC
PIP
OUT
MAIN
OUT
CS-1
CS-2
TV1
E3
I/O 1
I/O 2
C IN
(PIP)
SW2
CL
Y IN
(PIP)
ROD
LOD
RO1
(AVR)
LO1
(AVL)
CLAMP
Y IN
TV2R
TV2V
TV2L
TV R
TV V
TV L
GJ15 JP
GJ13
GJ14
GJ16
LV01
OPEN
LV02
OPEN
GJ03
OPEN JP
LV10
10u
CS60
63V0.10
RV01
4.7k
RY81
100
LY80
10u
CY40
7L50V10u
QY260
2SC2412K
RY82
1.8K
LV14
10u
CV38
CV46
B25V0.01
QS14
2SC2412K
QS13
2SC2412K
CS32
7L16V10u
CS33
7L16V10u
RS27
470
RS28
470
RS30
100K
RS29
100K
RS33
2.2k
RS34
QS12
RN2404
LV13
10u
CV29
16V100
CV30
B25V0.01
QV10
2SC2412K
QV48
2SC1815-Y
QV49
RV63
1k
RV81
4.7k
RV97
220
QV28
RN1403
RV85
1/2R100
RV93
100
RV140
10k
RV141
3K
RV142
10k
QV20
RN1404
DV25
MA111
QV21
2SC2412K
QV22
2SA1037K
CV67
50V1000p
CV68
7L50V1u
RV128
4.7k
RV127
330
RV126
270k
RV125
12K
RV124
3.9K
CV66
560
RV143
10k
CV65
50V1200p
CV64
7L50V10u
RV144
4.7k
QV23
2SA1037K
GND

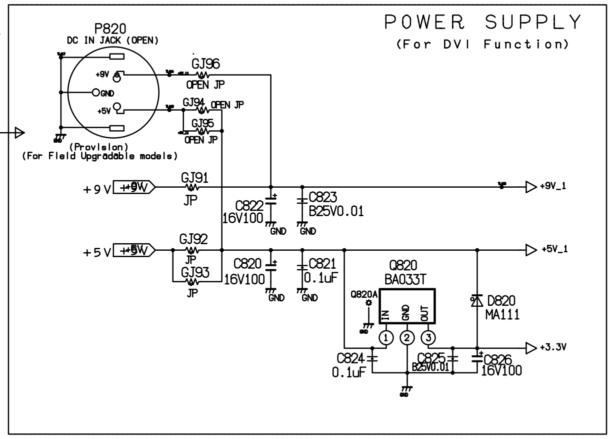

5
6
7
8
A
B
C
D
E
F
C831
OPEN
C830
OPEN
P105
PLUG 3P
107 GND
108 SELECT
109 +9V
TO RF-SWITCH
Q151
2SA933ASQ
R152
10k
R151
5.6K
R150
100
Q152
2SC2412K
GND
PV12
PLUG 9P
YE3
YGN
CE3
VE3
3GN
LE3
RE3
1 E3-Y
2 Y-GND
3 E3-C
4 GND
5 E3-V
6 V-GND
7 E3-L
8 E3-R
9 GND
TO FRONT IN
(to PV60)
E3
PLUG BB 56P(TAIKO) PV05
1 TV2-V
2 GND
3 TV2-A
4 GND
5 TV-V
6 TV-R
7 TV-L
8 GND
9 GND
10 R-OUT
11 L-OUT
12 R-IN
13 L-IN
14 GND
15 AVL
16 AVR
17 GND
18 NC
19 VARI-L
20 VARI-R
21 GND
22 GND
23 Pr2
24 Pb2
25 Y2
26 GND
27 VAV
28 GND
29 GND
30 Y-AV
31 GND
32 C-AV
33 GND
34 OPTION
35 NC
36 NC
37 NC
38 GND
39 Pr-1
40 Pb-1
41 Y-1
42 GND
43 A.MUTE
44 GND
45 SCL1
46 SDA1
47 +9V
48 GND
49 PIP-Y
50 GND
51 +5V
52 GND
53 SGA
54 DVD
55 PIP-VIDEO
56 SYNC-AV1
TO SIGNAL/CONVER PCB
(to PV06)
TV2V
TV2A
TVV
TVR
TVL
ROUT
LOUT
RIN
LIN
AVL
AVR
VARIL
VARIR
Pr2
Pb2
CV135
7L16V47u
VAV
YAV
CAV
OPTION
CV136
CV60
CV137
7L16V47u
Pr1
Pb1
Y1
SCL1
SDA1
+9V
GND
+5V
GJ20
JP
LY22
TEM2028K
MOL
QS01
RS25
22K
CS21
100p
2SC3268
MOR
QS11
RS26
22K
CS22
100p
RS31
10k
RS32
100K
CS23
OPEN
QV49
2SC1815-Y
CV27
10V470
RV89
68
MOV
RV93
100
RW45
10k
QW17
RN1401
RW40
1.8K
QV23
A1037K

AV / REM Board
65HDX82 series
[SHEET-1/2]


TO D-Stream Module MV14 to P203
PV14 PLUG 8P
DVI-Y
GND
DVI-Pb
GND
DVI-Pr
GND
SDA1
SCL1
CS2-L
CS2-R
GND
TO D-Stream Module MV13 to P202
PV13 PLUG 6P
+3V3
GND
CS2-DVI
GND
+5V
RESET
TO DMI (Provision)
PS15 OPEN
DVI-L
GND
DVI-R
PV04 JACK 7P HOSIDEN
D-Stream Audio
DVI1-L
DVI1-R
COLOR STREAM2
DVD2-L
DVD2-R
DVD2-Y
DVD2-Pb
DVD2-Pr
Audio Switch
QS90 MM1231XD
Video Switch
QV81 M52055P
QV91 2SC2412K
QV83 2SC2412K
Q822 PST994D
CV86 7L16V47u
CV85 7L16V47u
CV82 7L16V47u
CV83 7L16V47u
CV84 7L16V47u
CV87 7L16V47u
CS91 7L50V2.2u
CS92 7L50V2.2u
CS93 7L50V2.2u
CS94 7L50V2.2u
GJ83 OPEN JP
GJ84 OPEN JP
GJ85 OPEN JP
GJ86 OPEN JP
GJ87 OPEN JP
OPTION


REMOTE IN - OUT Board
TO AV PD0643(PR82)
TO SIGNAL/CONVER PD0639(P112)
PB51 5P 2.5mm
OUT
GND
NC
IN
GND
+5V-1
REM IN
GND
REM OUT
PB52 4P 2.5mm
LB52 100MH
LB51 100MH
DB53 1SS133
QB55 KTC3198Y
QB53 KTA1266Y
QB54 KTA1266Y
QB52 KTC3198Y
QB51 M5218AP
DB54 1SS133
DB52 1SS133
DB51 RPM-6763R-S
DB51A HOLDER
KB01 PIC-37043TE2
DB03 SIR-56SB3F
DB03A HOLDER
SHIELD
FUKAYA Design

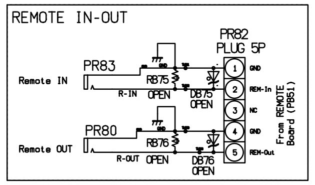
	65HDX82 Family	Field Upgradables 2001 & Previous year models
GJ91 GJ92 GJ93	USE	NOT USED
GJ94 GJ95 GJ96 P820	NOT USED	USE


POWER SUPPLY
(For DVI Function)
P820
DC IN JACK (OPEN)
(Provision)
(For Field Upgradable models)
GJ96 OPEN JP
GJ94 OPEN JP
GJ95 OPEN JP
GJ91 JP
GJ92 JP
GJ93 JP
+9V
+5V
C822 16V100
C823 B25V0.01
C820 16V100
C821 0.1uF
Q820 BA033T
D820 MA111
C824 0.1uF
C825 B25V0.01
C826 16V100
+9V_1
+5V_1
+3.3V

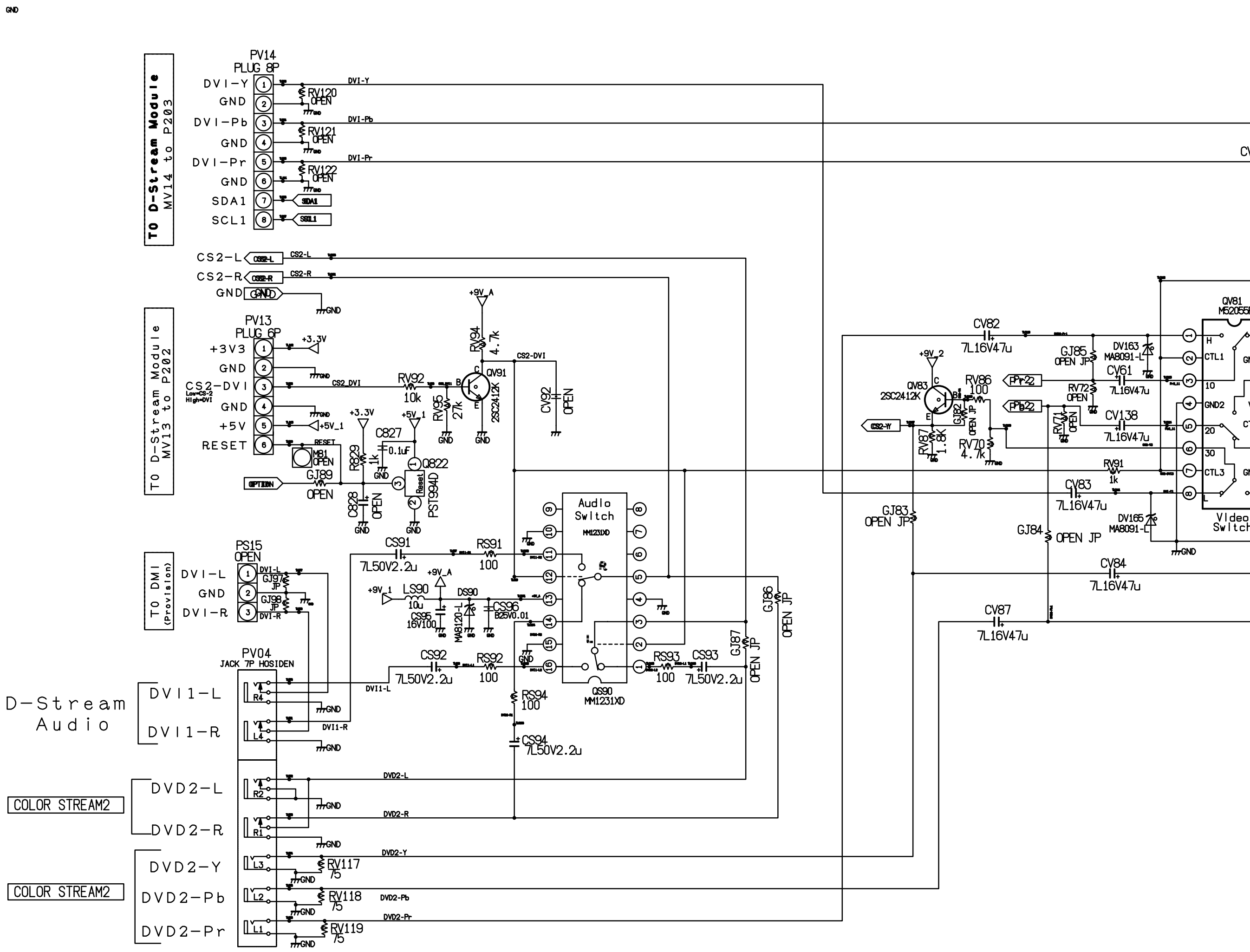
Notes:

1) GJ83, GJ84, GJ85, GJ86, GJ87 used for models without D-Stream.
For NON D-Stream models, ICs QV81, QS90, Q822 and
their peripheral circuit are Not used.

2) "OPTION" (PV05 pin 34) is just a 'Provision'. Presently no use.


REMOTE IN-OUT
PR82 PLUG 5P
PR83
Remote IN
PR80
Remote OUT
RB75
RB76
DB75 OPEN
DB76 OPEN
From REMOTE Board (PB51)

AV / REM Board
65HDX82 series
[SHEET-2/2]

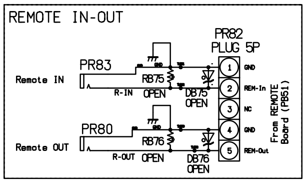


GND
TO D-Stream Module MV14 to P203
PV14 PLUG 8P
DVI-Y
GND
DVI-Pb
GND
DVI-Pr
GND
SDA1
SCL1
RV120 OPEN
RV121 OPEN
RV122 OPEN
CS2-L
CS2-R
GND
TO D-Stream Module MV13 to P202
PV13 PLUG 6P
+3V3
GND
CS2-DVI
Low=CS-2 High=DVI
GND
+5V
RESET
OPTION
GJ89 OPEN
+9V_A
RV94 4.7k
RV92 10k
QV91 2SC2412K
RV95 27k
CV92 OPEN
+3.3V
+5V_1
C827 0.1uF
R829 1k
Q822 PST994D
MB1 OPEN
C828 OPEN
TO DMI (Provision)
PS15 OPEN
DVI-L
GND
DVI-R
GJ97 JP
GJ98 JP
Audio Switch
MM1231XD
QS90 MM1231XD
CS91 7L50V2.2u
RS91 100
LS90 10u
DS90 MA8120-L
CS95 16V100
CS96 B25V0.01
CS92 7L50V2.2u
RS92 100
RS93 100
CS93 7L50V2.2u
RS94 100
CS94 7L50V2.2u
GJ86 OPEN JP
GJ87 OPEN JP
PV04 JACK 7P HOSIDEN
D-Stream Audio
DVI1-L
DVI1-R
COLOR STREAM2
DVD2-L
DVD2-R
DVD2-Y
DVD2-Pb
DVD2-Pr
RV117 75
RV118 75
RV119 75
CV82 7L16V47u
QV83 2SC2412K
+9V_2
RV86 100
RV87 1.8K
GJ82 OPEN
RV70 4.7k
RV71 OPEN
RV72 OPEN
GJ85 OPEN JP
CV61 7L16V47u
CV138 7L16V47u
DV163 MA8091-L
QV81 MG2055
RV91 1k
CV83 7L16V47u
DV165 MA8091-L
GJ83 OPEN JP
GJ84 OPEN JP
CV84 7L16V47u
CV87 7L16V47u
Video Switch

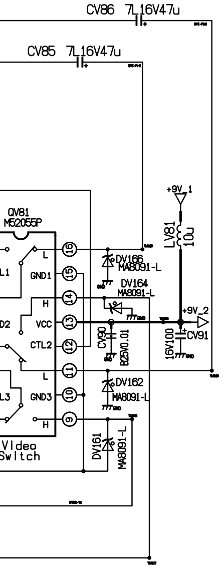
Notes:

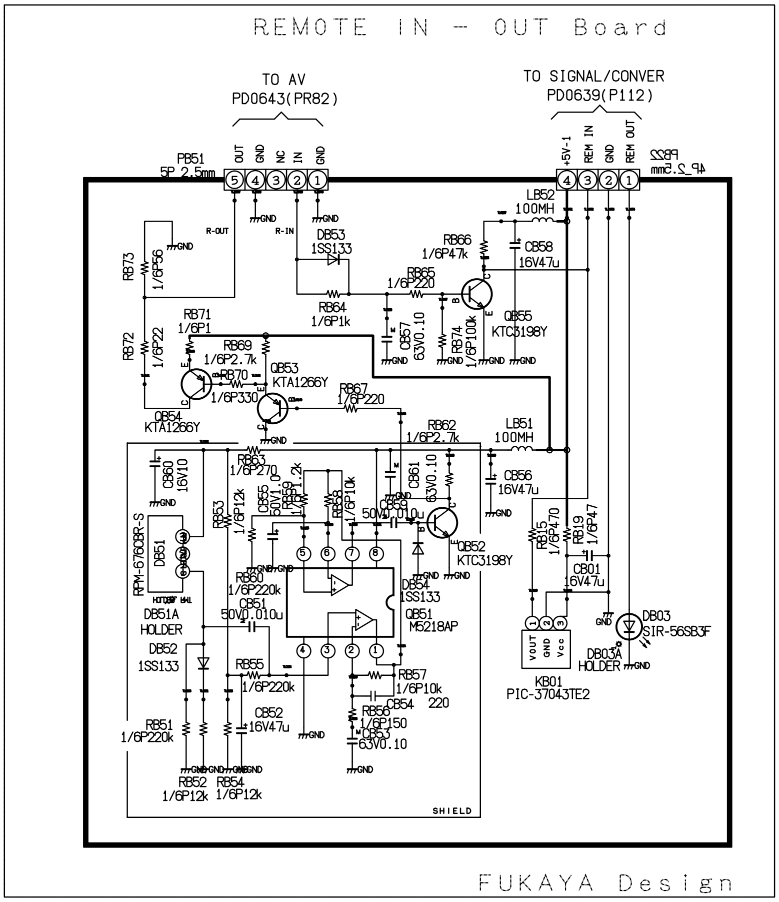
1) GJ83, GJ84, GJ85, GJ86, GJ87 used for models without D-Stream.
For NON D-Stream models, ICs QV81, QS90, Q822 and
their peripheral circuit are Not used.

2) "OPTION" (PV05 pin 34) is just a 'Provision'. Presently no use.

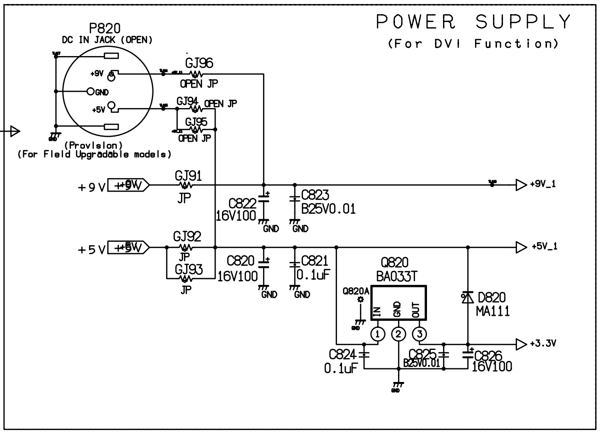


REMOTE IN-OUT
PR82 PLUG 5P
PR83
Remote IN
R-IN
RB75 OPEN
DB75 OPEN
PR80
Remote OUT
R-OUT
RB76 OPEN
DB76 OPEN
GND
REM-In
NC
GND
REM-Out
From REMOTE Board (PR81)


CV86 7L16V47u
CV85 7L16V47u
QV81
M52055P
GND1
VCC
CTL2
GND3
Video
Switch
DV166
MA8091-L
DV164
MA8091-L
DV162
MA8091-L
DV161
MA8091-L
CV90
B25V0.01
LV81
10u
+9V_1
+9V_2
16V100
CV91

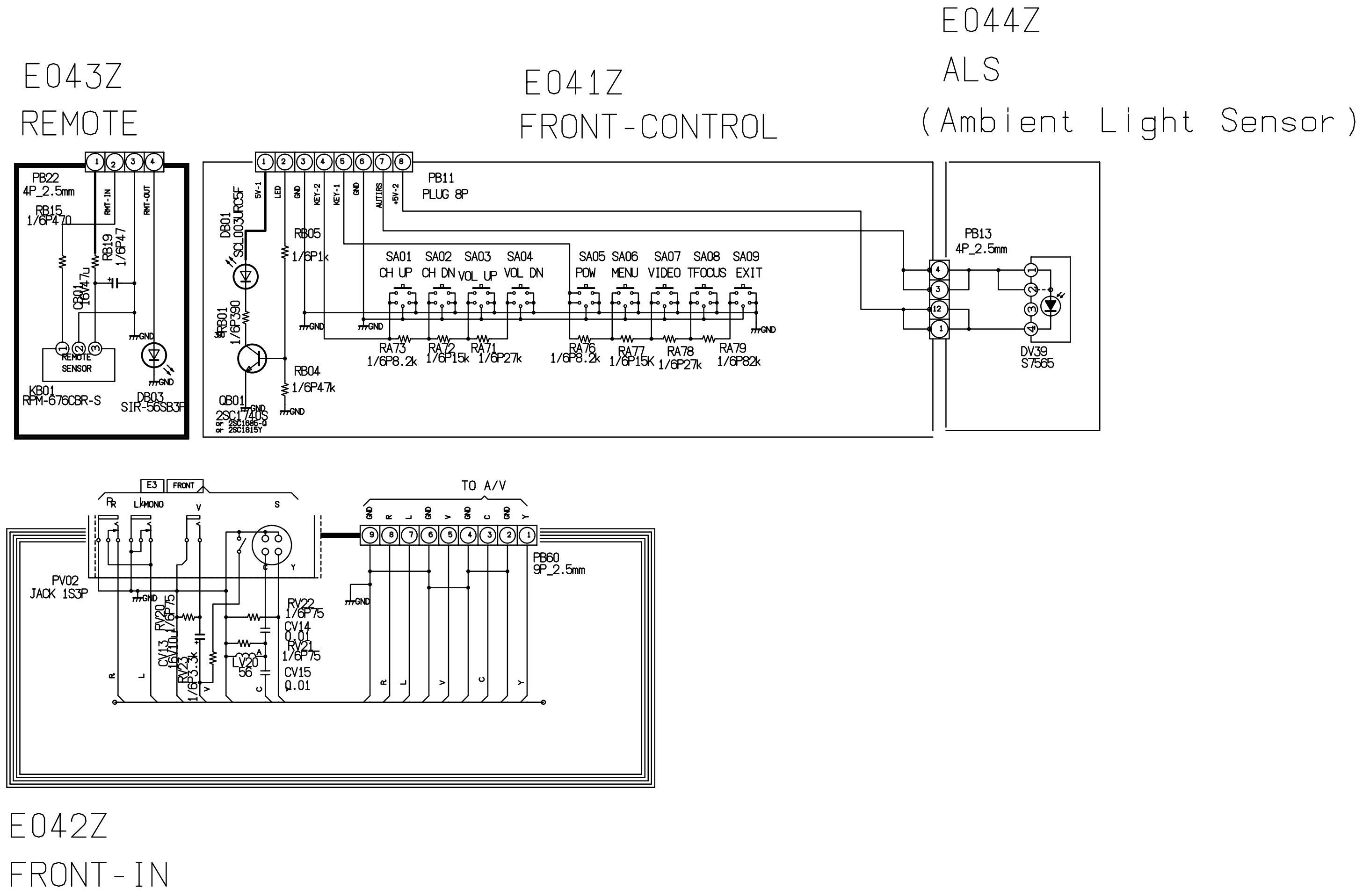

REMOTE IN - OUT Board
TO AV
PD0643(PR82)
TO SIGNAL/CONVER
PD0639(P112)
PB51
5P 2.5mm
OUT
GND
NC
IN
GND
+5V-1
REM IN
GND
REM OUT
PB22
4P 2.5mm
R-OUT
R-IN
DB53
1SS133
RB73
1/6P56
RB72
1/6P22
RB71
1/6P1
RB69
1/6P2.7k
RB70
1/6P330
QB53
KTA1266Y
QB54
KTA1266Y
RB67
1/6P220
RB64
1/6P1k
RB65
1/6P220
RB66
1/6P47k
CB57
63V0.10
RB74
1/6P100k
QB55
KTC3198Y
LB52
100MH
CB58
16V47u
RB62
1/6P2.7k
LB51
100MH
CB56
16V47u
RB63
1/6P270
CB60
16V10
RPM-6760R-S
DB51
DB51A
HOLDER
DB52
1SS133
RB53
1/6P12k
CB55
50V1.0
RB59
RB58
1/6P10k
CB59
50V0.010u
CB61
63V0.10
QB52
KTC3198Y
DB54
1SS133
QB51
M5218AP
RB60
1/6P220k
CB51
50V0.010u
RB55
1/6P220k
RB57
1/6P10k
CB54 220
RB56
1/6P150
CB53
63V0.10
CB52
16V47u
RB51
1/6P220k
RB52
1/6P12k
RB54
1/6P12k
RB15
1/6P470
RB19
1/6P47
CB01
16V47u
VOUT
GND
Vcc
KB01
PIC-37043TE2
DB03
SIR-56SB3F
DB03A
HOLDER
GND
SHIELD
FUKAYA Design

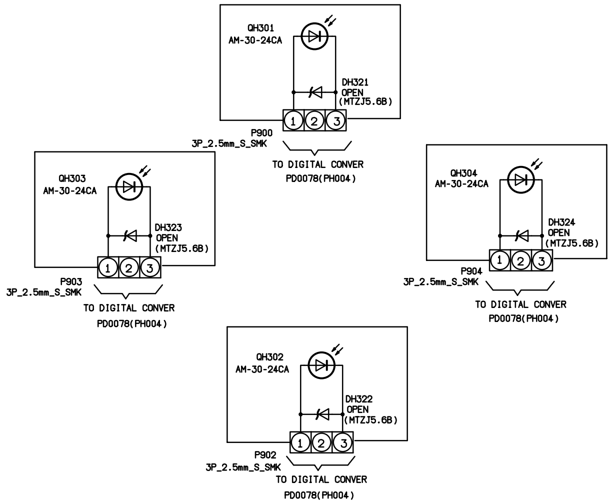
	65HDX82 Family	Field Upgradables 2001 & Previous year models
GJ91 GJ92 GJ93	USE	NOT USED
GJ94 GJ95 GJ96 P820	NOT USED	USE


POWER SUPPLY
(For DVI Function)
P820
DC IN JACK (OPEN)
+9V
GND
+5V
(Provision)
(For Field Upgradable models)
GJ96
OPEN JP
GJ94
OPEN JP
GJ95
OPEN JP
+9V
GJ91
JP
C822
16V100
C823
B25V0.01
GND
+9V_1
+5V
GJ92
JP
GJ93
JP
C820
16V100
C821
0.1uF
Q820
BA033T
Q820A
IN
GND
OUT
D820
MA111
+5V_1
+3.3V
C824
0.1uF
C825
B25V0.01
C826
16V100

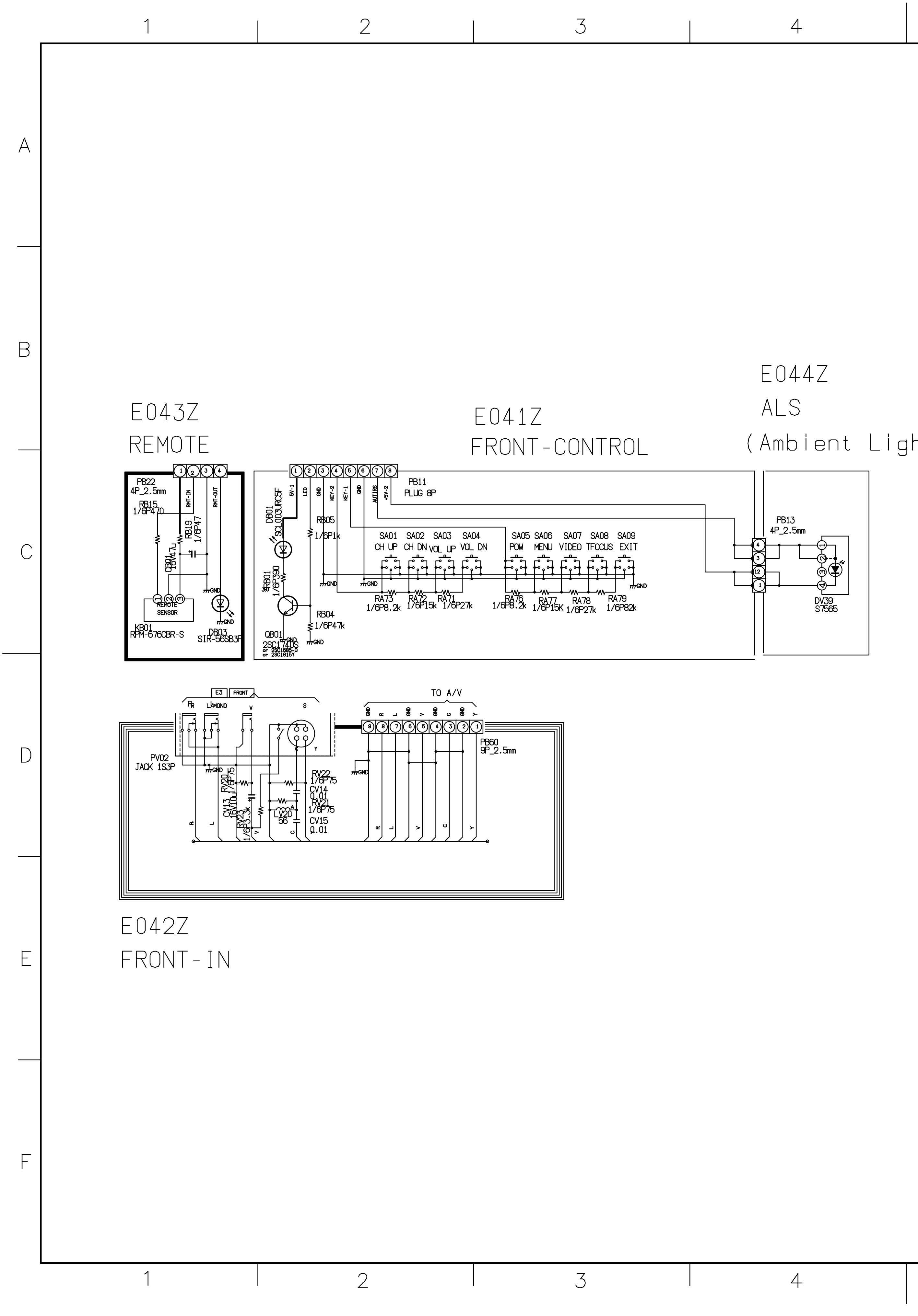
AV / REM Board
65HDX82 series

[SHEET-2/2]

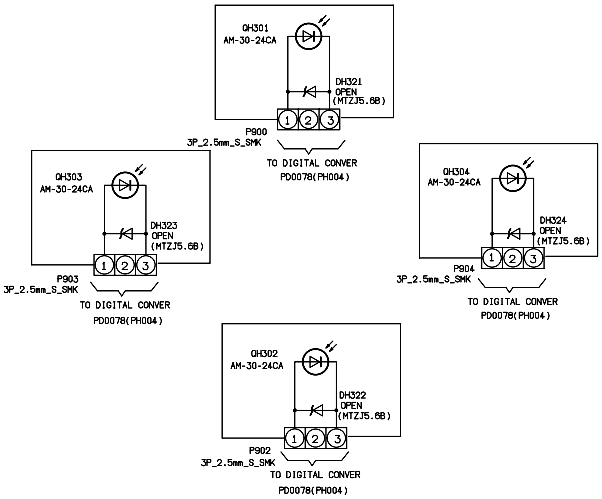

E043Z
REMOTE
PB22
4P_2.5mm
RMT-IN
RMT-OUT
RB15
1/6P470
RB19
1/6P47
CB01
16V47u
GND
REMOTE
SENSOR
KB01
RPM-676CBR-S
DB03
SIR-56SB3F
E041Z
FRONT-CONTROL
PB11
PLUG 8P
5V-1
LED
GND
KEY-2
KEY-1
GND
AUTIRS
+5V-2
DB01
SCL003URC5F
RB05
1/6P1k
RB01
1/6P390
RB04
1/6P47k
QB01
2SC1740S
or 2SC1685-Q
or 2SC1815Y
SA01
CH UP
SA02
CH DN
SA03
VOL UP
SA04
VOL DN
SA05
POW
SA06
MENU
SA07
VIDEO
SA08
TFOCUS
SA09
EXIT
RA73
1/6P8.2k
RA72
1/6P15k
RA71
1/6P27k
RA76
1/6P8.2k
RA77
1/6P15K
RA78
1/6P27k
RA79
1/6P82k
E044Z
ALS
(Ambient Light Sensor)
PB13
4P_2.5mm
DV39
S7565
E3
FRONT
R
L/MONO
V
S
C
Y
PV02
JACK 1S3P
RV20
1/6P75
CV13
16V10u
RV23
1/6P3.3k
RV22
1/6P75
CV14
0.01
RV21
1/6P75
LV20
56
CV15
0.01
TO A/V
GND
PB60
9P_2.5mm
E042Z
FRONT-IN


QH301
AM-30-24CA
DH321
OPEN
(MTZJ5.6B)
P900
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH303
AM-30-24CA
DH323
OPEN
(MTZJ5.6B)
P903
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH304
AM-30-24CA
DH324
OPEN
(MTZJ5.6B)
P904
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH302
AM-30-24CA
DH322
OPEN
(MTZJ5.6B)
P902
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)

FRONT
T.FOCUS-SENSOR
65HDX82 Series


1
2
3
4
A
B
C
D
E
F
E043Z
REMOTE
E041Z
FRONT-CONTROL
E044Z
ALS
(Ambient Ligh
PB22
4P_2.5mm
RMT-IN
RMT-OUT
RB15
1/6P470
RB19
1/6P47
CB01
16V47u
GND
REMOTE
SENSOR
KB01
RPM-676CBR-S
DB03
SIR-56SB3F
PB11
PLUG 8P
5V-1
LED
GND
KEY-2
KEY-1
GND
AUTIRS
+5V-2
DB01
SCL003URC5F
RB05
1/6P1k
RB01
1/6P390
QB01
2SC1740S
or 2SC1685-Q
or 2SC1815Y
RB04
1/6P47k
SA01
CH UP
SA02
CH DN
SA03
VOL UP
SA04
VOL DN
SA05
POW
SA06
MENU
SA07
VIDEO
SA08
TFOCUS
SA09
EXIT
RA73
1/6P8.2k
RA72
1/6P15k
RA71
1/6P27k
RA76
1/6P8.2k
RA77
1/6P15K
RA78
1/6P27k
RA79
1/6P82k
PB13
4P_2.5mm
DV39
S7565
E3
FRONT
R
L/MONO
V
S
C
Y
PV02
JACK 1S3P
RV20
1/6P75
CV13
16V10u
RV23
1/6P3.3k
LV20
56
RV22
1/6P75
CV14
0.01
RV21
1/6P75
CV15
0.01
TO A/V
GND
R
L
GND
V
GND
C
GND
Y
PB60
9P_2.5mm
E042Z
FRONT-IN

ght Sensor)


QH301
AM-30-24CA
DH321
OPEN
(MTZJ5.6B)
1 2 3
P900
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH303
AM-30-24CA
DH323
OPEN
(MTZJ5.6B)
1 2 3
P903
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH304
AM-30-24CA
DH324
OPEN
(MTZJ5.6B)
1 2 3
P904
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH302
AM-30-24CA
DH322
OPEN
(MTZJ5.6B)
1 2 3
P902
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)

FRONT

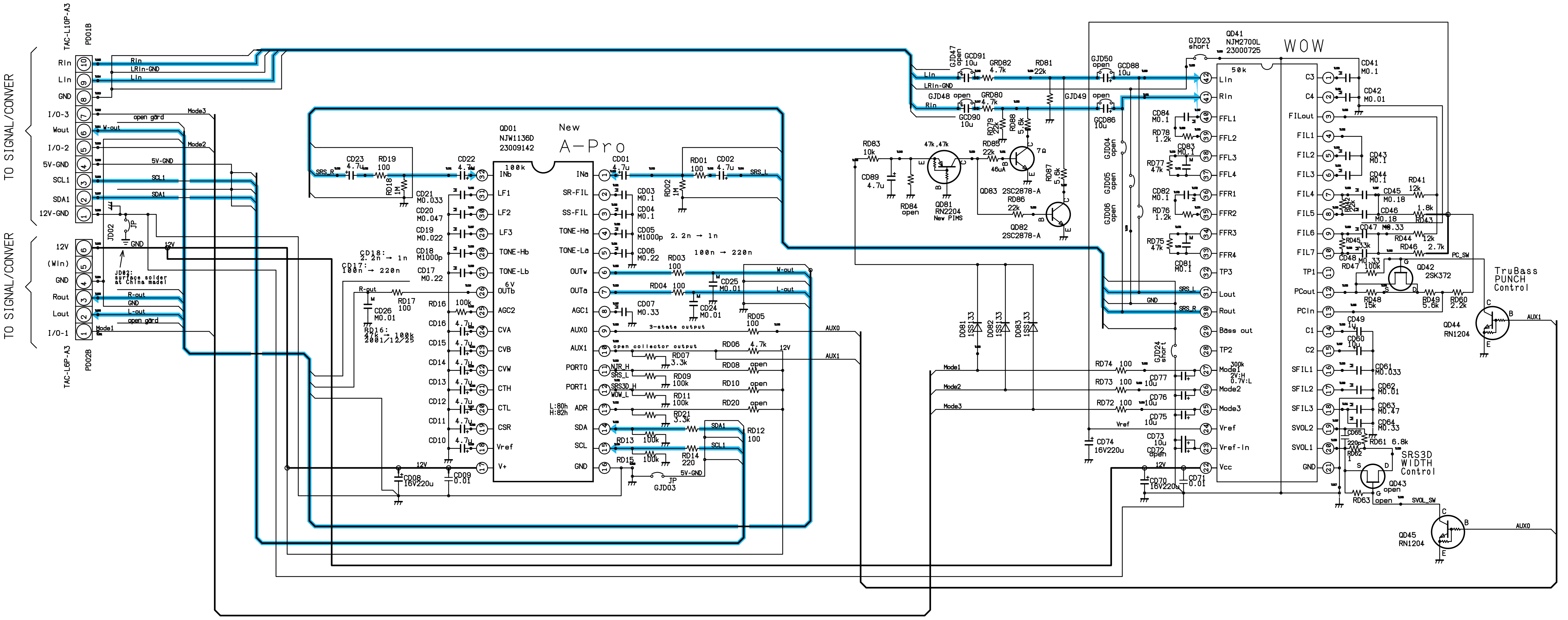
T.FOCUS-SENSOR

65HDX82 Series

Base model: 36HFX72
PD0645A
23787466

WOW	H	H	H
FOCUS	H	L	L
3D-STEREO	L	L	H
TruBass	L	H	L
BYPASS	L	L	L
	Mode1	Mode2	Mode3

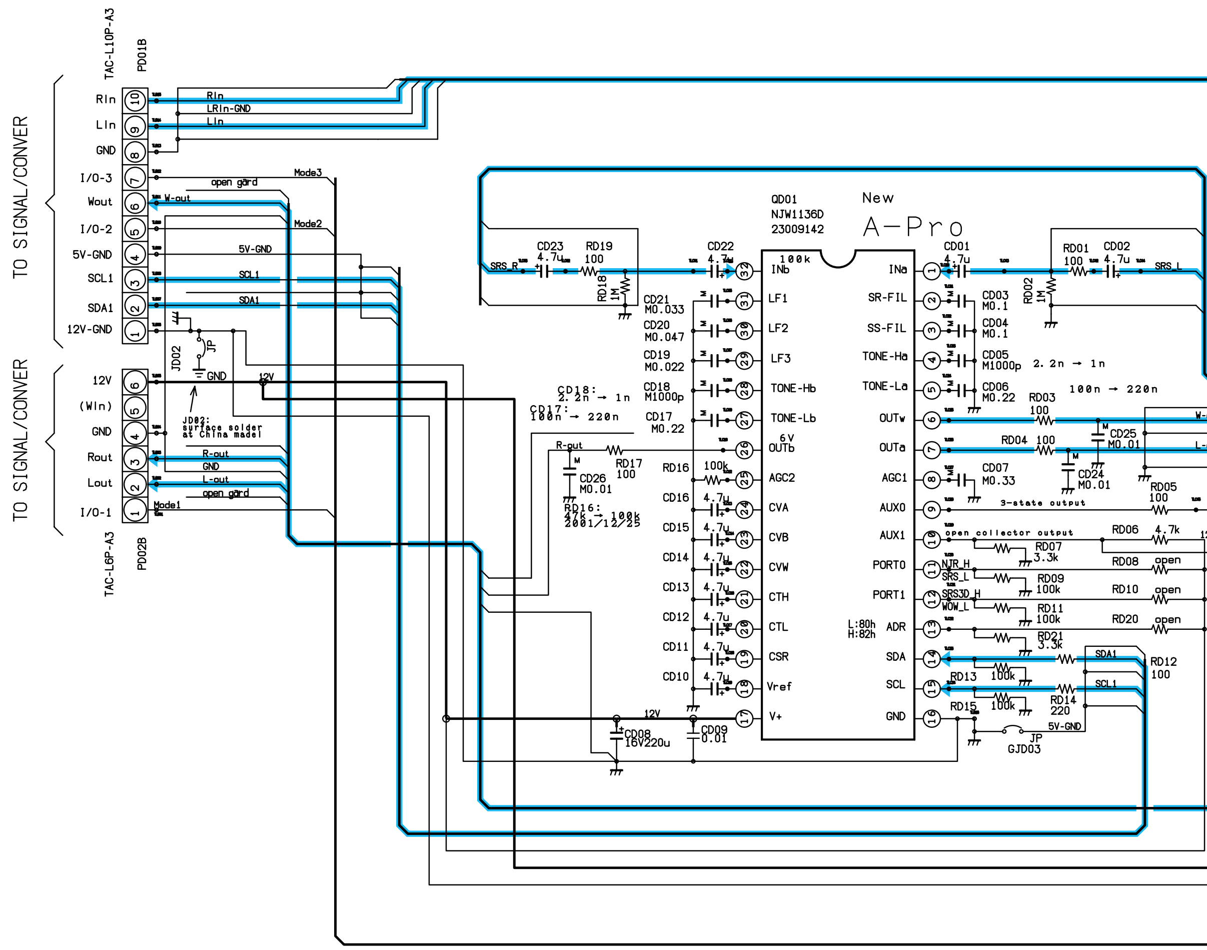
US_LCoS_57HL82	PD0645E	45047	57HL82
US_PJ_TNP_WOW	PD0645B	23787523	50HX82
US_DView_TNP_WOW	PD0645A	23787466	36HFX72
US_PJ_TNP_WOW_#1	FWD666	44806	50HX82_#1
US_DView_TVE	PDxxx6	2378xxx6	34HF81-
US_DView_TNP_WOW_#1	FWD666A	44814	36HFX72_#1
Asia_PJ_TSP_WOW	PDxxx4	2378xxx4	43VH9UE
Asia_PJ_DLTV_WOW	PD0645D	45131	43VH9UC
Asia_DView_TVE_WOW	PD0645C	44939	29VX9UH
Asia_DView_TVE_A-Pro	FWD666B	44930	29VH9UH
	unit	SN	model


TO SIGNAL/CONVER
TAC-L10P-A3
PD01B
RIn
LIn
GND
I/O-3
Wout
I/O-2
5V-GND
SCL1
SDA1
12V-GND
LRIn-GND
Mode3
Mode2
Mode1
open gard
W-out
JD02
JP
JD02: surface solder at China model
TO SIGNAL/CONVER
TAC-L6P-A3
PD02B
12V
(WIn)
Rout
Lout
I/O-1
R-out
L-out
SRS_R
CD23 4.7u
RD19 100
RD18 1M
CD18: 2.2n → 1n
CD17: 100n → 220n
RD16: 47k → 100k 2001/12/25
CD26 M0.01
RD17 100
QD01
NJW1136D
23009142
New
A-Pro
100k
INb
LF1
LF2
LF3
TONE-Hb
TONE-Lb
6V OUTb
AGC2
CVA
CVB
CVW
CTH
CTL
CSR
Vref
V+
INa
SR-FIL
SS-FIL
TONE-Ha
TONE-La
OUTw
OUTa
AGC1
AUX0
AUX1
PORT0
PORT1
ADR
SDA
SCL
GND
L:80h H:82h
CD22 4.7u
CD21 M0.033
CD20 M0.047
CD19 M0.022
CD18 M1000p
CD17 M0.22
RD16 100k
CD16 4.7u
CD15 4.7u
CD14 4.7u
CD13 4.7u
CD12 4.7u
CD11 4.7u
CD10 4.7u
CD08 16V220u
CD09 0.01
CD01 4.7u
RD01 100
CD02 4.7u
SRS_L
RD02 1M
CD03 M0.1
CD04 M0.1
CD05 M1000p
2.2n → 1n
CD06 M0.22
100n → 220n
RD03 100
RD04 100
CD25 M0.01
CD24 M0.01
CD07 M0.33
RD05 100
3-state output
open collector output
RD06 4.7k
RD07 3.3k
RD08 open
NJR_H
SRS_L
RD09 100k
RD10 open
SRS3D_H
WOW_L
RD11 100k
RD20 open
RD21 3.3k
RD12 100
RD13 100k
RD14 220
RD15 100k
5V-GND
JP
GJD03
AUX0
AUX1
GJD47 open
GCD91 10u
GRD82 4.7k
RD81 22k
GJD48 open
GRD80 4.7k
GCD90 10u
RD79 22k
RD88 5.6k
GJD49
GJD50 open
GCD88 10u
GCD86 10u
RD83 10k
CD89 4.7u
RD84 open
47k,47k
QD81 RN2204 New PIMS
RD85 22k
46uA
7Ω
QD83 2SC2878-A
RD86 22k
RD87 5.6k
QD82 2SC2878-A
GJD04 open
GJD05 open
GJD06 open
DD81 1SS133
DD82 1SS133
DD83 1SS133
GJD23 short
QD41
NJM2700L
23000725
WOW
50k
LIn
RIn
FFL1
FFL2
FFL3
FFL4
FFR1
FFR2
FFR3
FFR4
TP3
Lout
Rout
Bass out
TP2
Mode1
Mode2
Mode3
Vref
Vref-In
Vcc
300k 2V:H 0.7V:L
CD84 M0.1
RD78 1.2k
CD83 M0.1
RD77 47k
CD82 M0.1
RD76 1.2k
RD75 47k
CD81 M0.1
GJD24 short
RD74 100
RD73 100
CD77 10u
RD72 100
CD76 10u
CD75 10u
CD74 16V220u
CD73 10u
CD72 open
CD70 16V220u
CD71 0.01
C3
C4
FILout
FIL1
FIL2
FIL3
FIL4
FIL5
FIL6
FIL7
TP1
PCout
PCIn
C1
C2
SFIL1
SFIL2
SFIL3
SVOL2
SVOL1
CD41 M0.1
CD42 M0.01
CD43 M0.1
CD44 M0.1
CD45 M0.18
RD41 12k
RD42 22k
CD46 M0.18
RD43 1.8k
CD47 M0.33
RD44 12k
RD45 33k
RD46 2.7k
CD48 M0.33
PC_SW
RD47 100k
QD42 2SK372
RD48 15k
RD49 5.6k
RD60 2.2k
TruBass PUNCH Control
QD44 RN1204
CD49 1u
CD60 10u
CD61 M0.033
CD62 M0.01
CD63 M0.47
CD64 M0.33
CD65 220p
RD61 6.8k
RD62 1
SRS3D WIDTH Control
QD43 open
RD63 open
SVOL_SW
QD45 RN1204

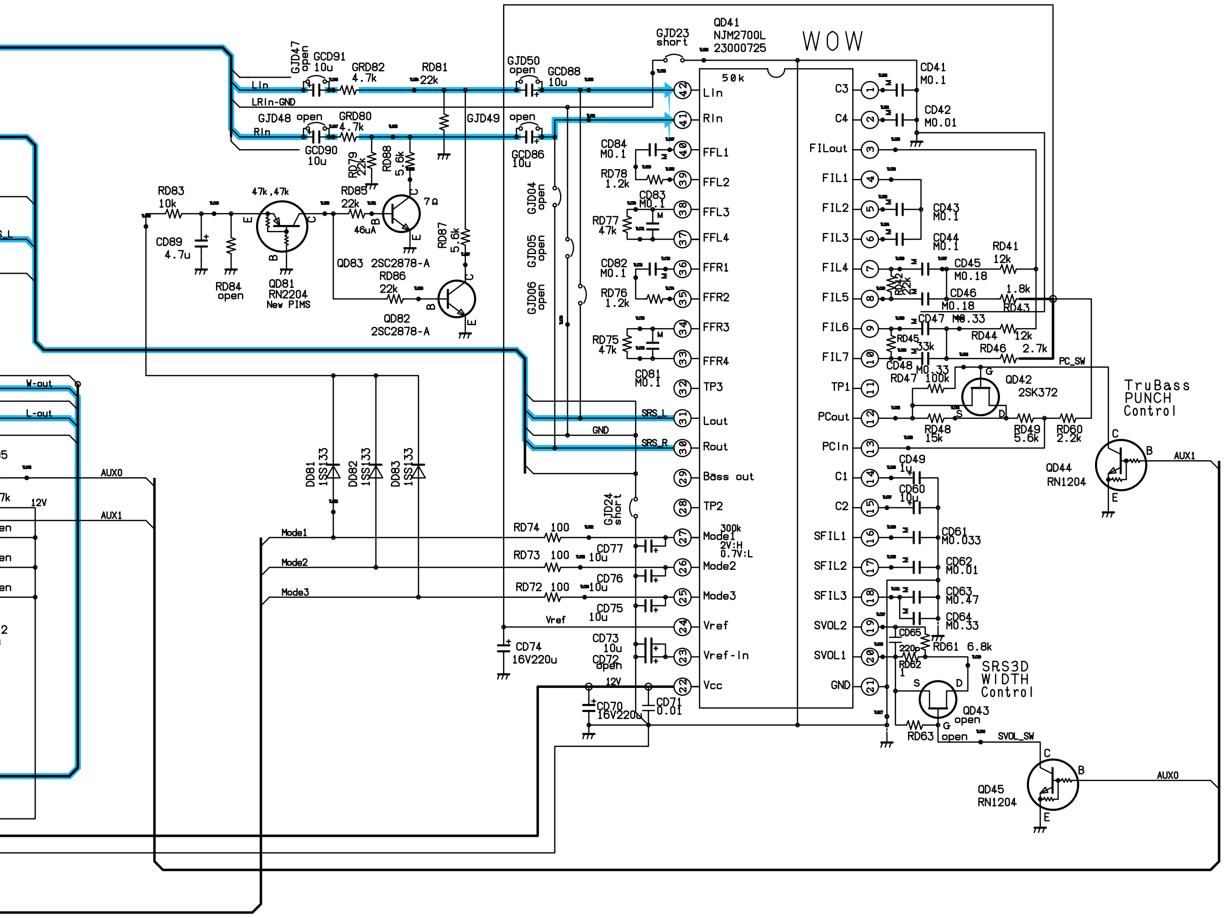
SRS-WOW
65HDX82 Series

Base model: 36HFX72
PD0645A
23787466

WOW	H	H	H
FOCUS	H	L	L
3D-STEREO	L	L	H
TruBass	L	H	L
BYPASS	L	L	L
	Mode1	Mode2	Mode3

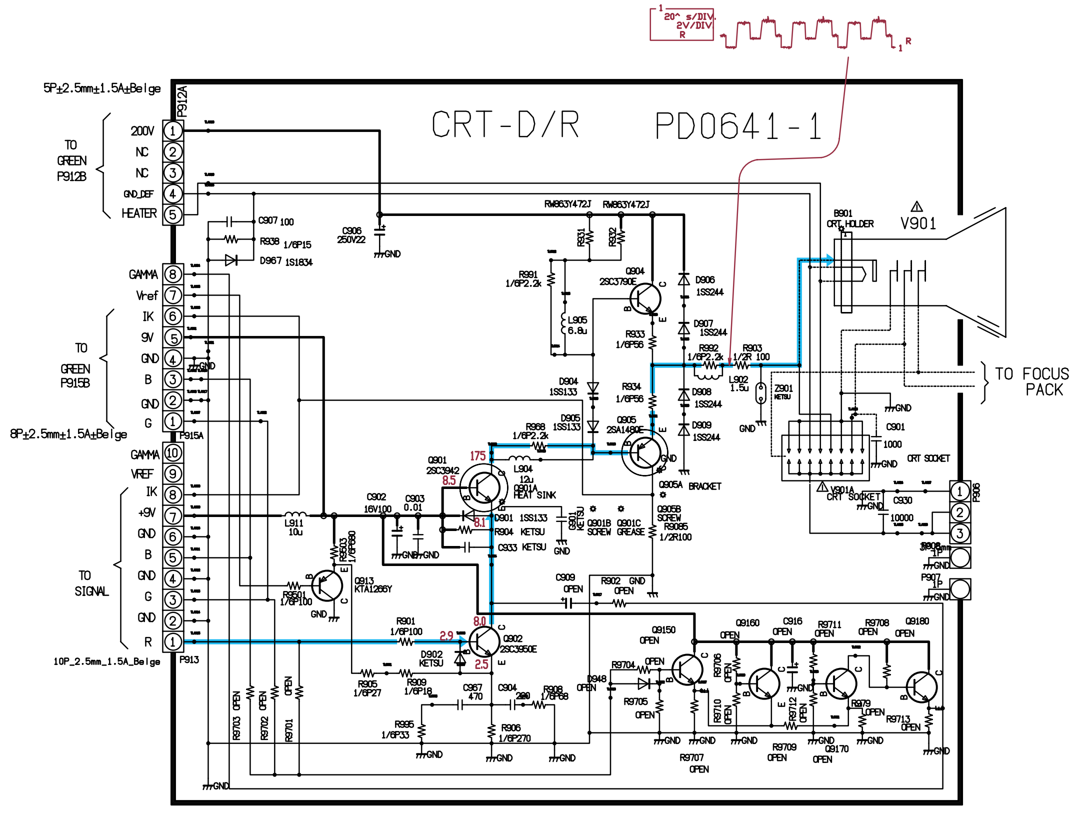

TAC-L10P-A3
PD01B
TO SIGNAL/CONVER
RIn
LIn
GND
I/O-3
Wout
I/O-2
5V-GND
SCL1
SDA1
12V-GND
RIn
LRIn-GND
LIn
open gard
Mode3
W-out
Mode2
5V-GND
SCL1
SDA1
JD02
JP
GND
12V
JD02: surface solder at China model
TO SIGNAL/CONVER
12V
(WIn)
GND
Rout
Lout
I/O-1
R-out
GND
L-out
open gard
Mode1
TAC-L6P-A3
PD02B
QD01
NJW1136D
23009142
New
A-Pro
CD23 4.7u
RD19 100
SRS_R
CD22 4.7u
RD18 1M
100k
INb
LF1
LF2
LF3
TONE-Hb
TONE-Lb
6V OUTb
AGC2
CVA
CVB
CVW
CTH
CTL
CSR
Vref
V+
INa
SR-FIL
SS-FIL
TONE-Ha
TONE-La
OUTw
OUTa
AGC1
AUX0
AUX1
PORT0
PORT1
ADR
SDA
SCL
GND
L:80h H:82h
CD21 M0.033
CD20 M0.047
CD19 M0.022
CD18 M1000p
CD17 M0.22
CD18: 2.2n → 1n
CD17: 100n → 220n
R-out
RD17 100
CD26 M0.01
RD16: 47k → 100k 2001/12/25
RD16 100k
CD16 4.7u
CD15 4.7u
CD14 4.7u
CD13 4.7u
CD12 4.7u
CD11 4.7u
CD10 4.7u
12V
CD08 16V220u
CD09 0.01
CD01 4.7u
RD01 100
CD02 4.7u
SRS_L
RD02 1M
CD03 M0.1
CD04 M0.1
CD05 M1000p
2.2n → 1n
CD06 M0.22
100n → 220n
RD03 100
CD25 M0.01
RD04 100
CD24 M0.01
CD07 M0.33
RD05 100
3-state output
open collector output
RD06 4.7k
RD07 3.3k
RD08 open
NJR_H
SRS_L
RD09 100k
RD10 open
SRS3D_H
WOW_L
RD11 100k
RD20 open
RD21 3.3k
SDA1
RD12 100
RD13 100k
SCL1
RD14 220
RD15 100k
JP GJD03
5V-GND

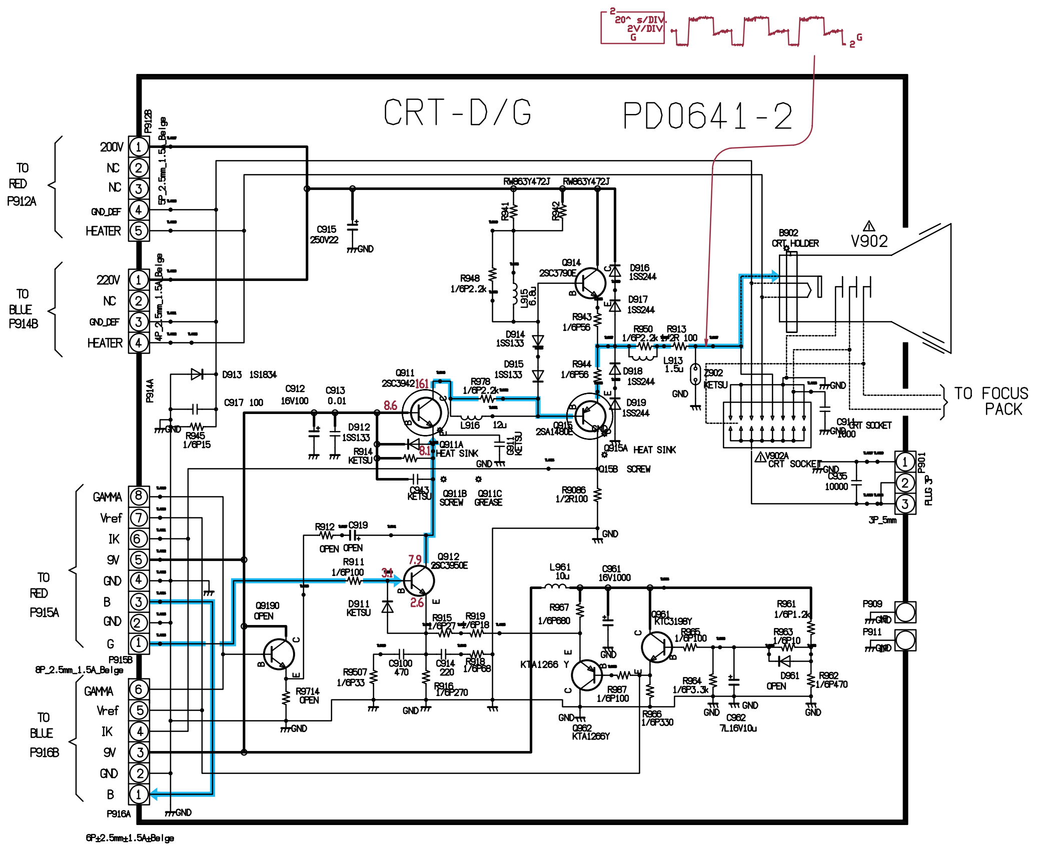
US_LCoS_57HL82	PD0645E	45047	57HL82
US_PJ_TNP_WOW	PD0645B	23787523	50HX82
US_DView_TNP_WOW	PD0645A	23787466	36HFX72
US_PJ_TNP_WOW_#1	FWD666	44806	50HX82_#1
US_DView_TVE	PDxxx6	2378xxx6	34HF81-
US_DView_TNP_WOW_#1	FWD666A	44814	36HFX72_#1
Asia_PJ_TSP_WOW	PDxxx4	2378xxx4	43VH9UE
Asia_PJ_DLTV_WOW	PD0645D	45131	43VH9UC
Asia_DView_TVE_WOW	PD0645C	44939	29VX9UH
Asia_DView_TVE_A-Pro	FWD666B	44930	29VH9UH
	unit	SN	model

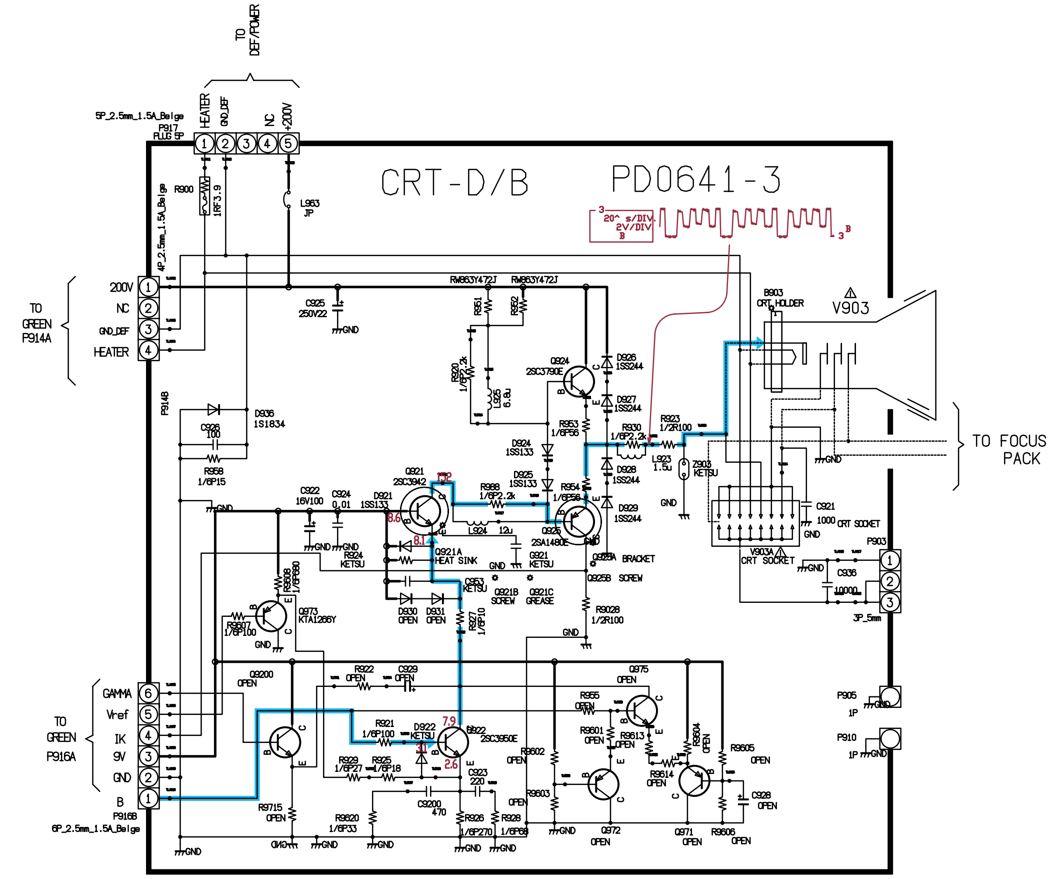


WOW
QD41 NJM2700L 23000725
50k
GJD23 short
GJD47 open
GCD91 10u
GRD82 4.7k
RD81 22k
GJD50 open
GCD88 10u
LIn
LRIn-GND
RIn
GJD48 open
GRD80 4.7k
GCD90 10u
GJD49 open
GCD86 10u
RD79 22k
RD88 5.6k
RD83 10k
CD89 4.7u
RD84 open
QD81 RN2204 New PIMS
47k,47k
RD85 22k
46uA
7Ω
QD83 2SC2878-A
RD87 5.6k
RD86 22k
QD82 2SC2878-A
GJD04 open
GJD05 open
GJD06 open
CD84 M0.1
RD78 1.2k
CD83 M0.1
RD77 47k
CD82 M0.1
RD76 1.2k
RD75 47k
CD81 M0.1
FFL1
FFL2
FFL3
FFL4
FFR1
FFR2
FFR3
FFR4
TP1
TP2
TP3
Lout
Rout
SRS_L
SRS_R
GND
Bass out
GJD24 short
W-out
L-out
AUX0
AUX1
12V
DD81 1SS133
DD82 1SS133
DD83 1SS133
Mode1
Mode2
Mode3
RD74 100
RD73 100
RD72 100
CD77 10u
CD76 10u
CD75 10u
300k
2V:H
0.7V:L
Vref
Vref-In
Vcc
CD74 16V220u
CD73 10u
CD72 open
CD70 16V220u
CD71 0.01
C3
C4
FILout
FIL1
FIL2
FIL3
FIL4
FIL5
FIL6
FIL7
PCout
PCIn
C1
C2
SFIL1
SFIL2
SFIL3
SVOL2
SVOL1
CD41 M0.1
CD42 M0.01
CD43 M0.1
CD44 M0.1
CD45 M0.18
CD46 M0.18
CD47 M0.33
CD48 M0.33
RD41 12k
RD42 1.8k
RD43 1.8k
RD44 12k
RD45 33k
RD46 2.7k
RD47 100k
PC_SW
QD42 2SK372
RD48 15k
RD49 5.6k
RD60 2.2k
TruBass PUNCH Control
QD44 RN1204
CD49 1u
CD60 10u
CD61 M0.033
CD62 M0.01
CD63 M0.47
CD64 M0.33
CD65 220p
RD61 6.8k
RD62 1
SRS3D WIDTH Control
QD43 open
RD63 open
SVOL_SW
QD45 RN1204

SRS-WOW
65HDX82 Series


CRT-D/R
PD0641-1
20^ s/DIV
2V/DIV
R
V901
B901 CRT HOLDER
TO FOCUS PACK
TO GREEN P912B
200V
NC
GND,DEF
HEATER
TO GREEN P915B
GAMMA
Vref
IK
9V
GND
B
G
TO SIGNAL
+9V
R
5P,2.5mm,1.5A,Beige
8P,2.5mm,1.5A,Beige
10P_2.5mm_1.5A_Beige
P912A
P915A
P913
Q901 2SC3942
Q902 2SC3950E
Q904 2SC3790E
Q905 2SA1480E
Q913 KTA1266Y
V901A CRT SOCKET
CRT SOCKET
175
8.5
8.1
2.9
2.5
8.0

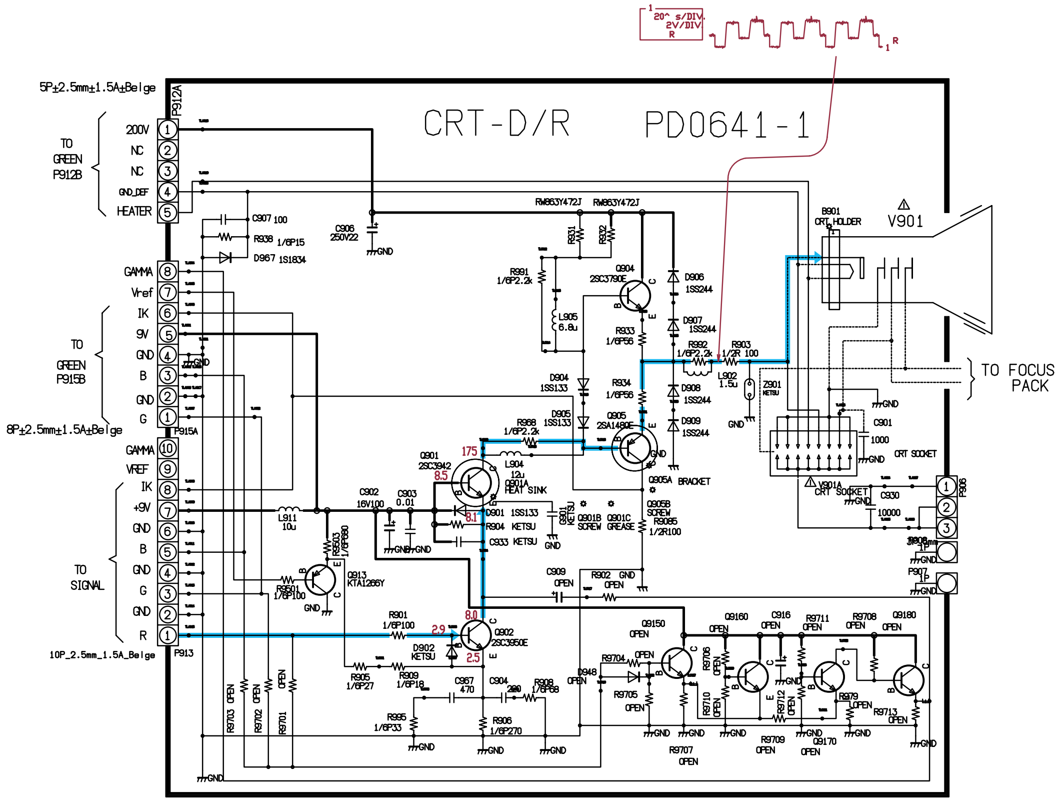

CRT-D/G
PD0641-2
20^ s/DIV
2V/DIV
G
V902
B902 CRT HOLDER
TO FOCUS PACK
TO RED P912A
TO BLUE P914B
TO RED P915A
TO BLUE P916B
200V
220V
NC
GND,DEF
HEATER
GAMMA
Vref
IK
9V
GND
B
G
PLUG 3P
3P_5mm
P911
P909
Q911 2SC3942
Q912 2SC3950E
Q914 2SC3790E
Q915 2SA1480E
Q992 KTA1266Y
V902A CRT SOCKET
CRT SOCKET
161
8.6
8.1
7.9
2.6
6P,2.5mm,1.5A,Beige
8P_2.5mm_1.5A_Beige


TO DEF/POWER
HEATER
GND,DEF
NC
+200V
5P_2.5mm_1.5A_Beige
P917 PLUG 5P
CRT-D/B
PD0641-3
20^ s/DIV
2V/DIV
B
V903
B903 CRT HOLDER
TO FOCUS PACK
TO GREEN P914A
200V
NC
GND,DEF
HEATER
TO GREEN P916A
GAMMA
Vref
IK
9V
GND
B
P903
3P_5mm
P905
P910
Q921 2SC3942
Q922 2SC3950E
Q924 2SC3790E
Q925 2SA1480E
Q973 KTA1266Y
V903A CRT SOCKET
CRT SOCKET
152
8.6
8.1
7.9
2.6
6P_2.5mm_1.5A_Beige

CRTSVM(CRT-DRIVE)
65HDX82 series
[SHEET-1/2]

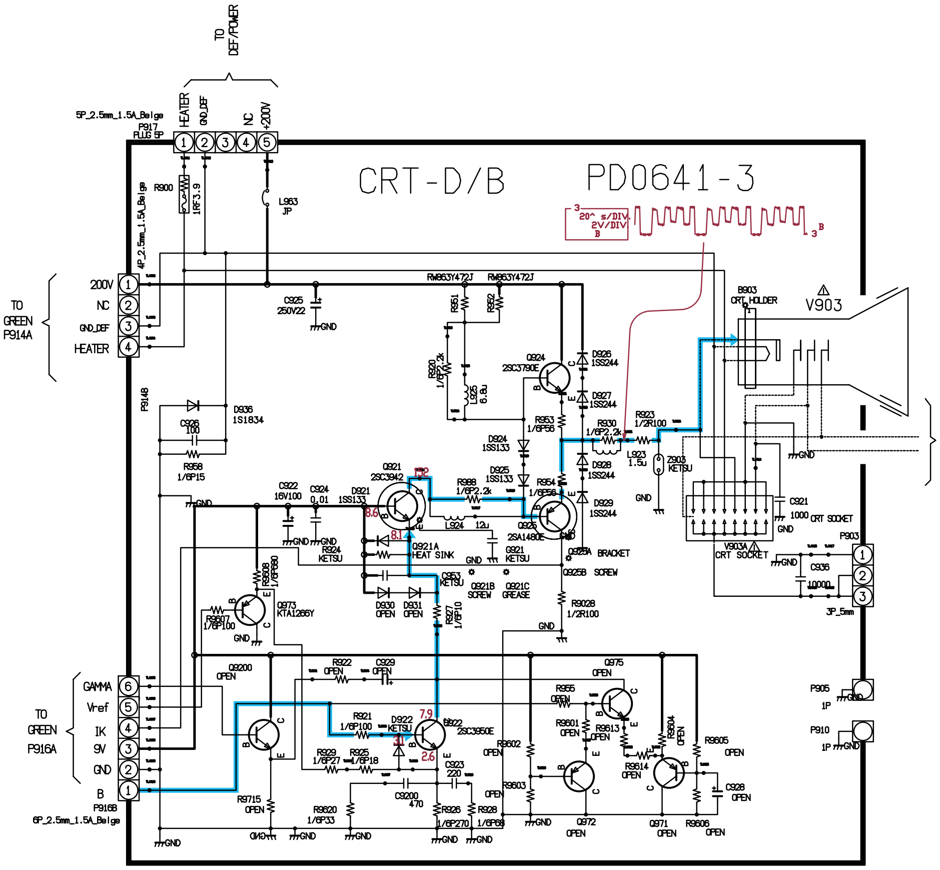
1 2 3 4

A
B
C



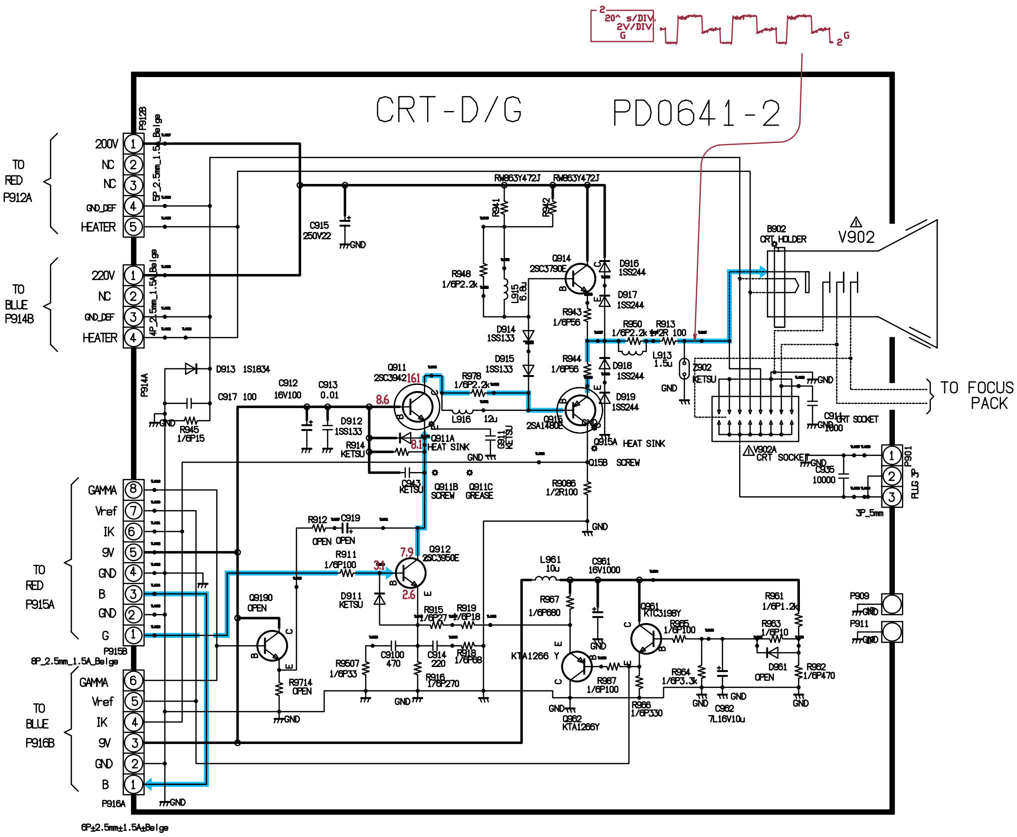
CRT-D/R PD0641-1
1 20^ s/DIV, 2V/DIV R
1 R
5P±2.5mm±1.5A±Beige
P912A
TO GREEN P912B
200V
NC
NC
GND_DEF
HEATER
TO GREEN P915B
GAMMA
Vref
IK
9V
GND
B
GND
G
8P±2.5mm±1.5A±Beige
P915A
TO SIGNAL
GAMMA
VREF
IK
+9V
GND
B
GND
G
GND
R
10P_2.5mm_1.5A_Beige
P913
C907 100
R938 1/6P15
D967 1S1834
C906 250V22
GND
RW863Y472J
RW863Y472J
R931
R932
R991 1/6P2.2k
L905 6.8u
Q904 2SC3790E
D906 1SS244
D907 1SS244
R933 1/6P56
R992 1/6P2.2k
R903 1/2R 100
L902 1.5u
Z901 KETSU
D904 1SS133
R934 1/6P56
D908 1SS244
D909 1SS244
D905 1SS133
R988 1/6P2.2k
Q905 2SA1480E
Q905A BRACKET
Q905B SCREW
R9085 1/2R100
Q901 2SC3942
175
8.5
8.1
L904 12u
Q901A HEAT SINK
D901 1SS133
R904 KETSU
C933 KETSU
G901 KETSU
Q901B SCREW
Q901C GREASE
C902 16V100
C903 0.01
L911 10u
R9603 1/6P680
Q913 KTA1266Y
R9501 1/6P100
R901 1/6P100
2.9
8.0
2.5
D902 KETSU
Q902 2SC3950E
C909 OPEN
R902 OPEN
R905 1/6P27
R909 1/6P18
C967 470
C904 220
R908 1/6P68
R995 1/6P33
R906 1/6P270
R9703 OPEN
R9702 OPEN
R9701 OPEN
D948 OPEN
R9704 OPEN
R9705 OPEN
Q9150 OPEN
Q9160 OPEN
C916 OPEN
R9711 OPEN
R9708 OPEN
Q9180 OPEN
R9706 OPEN
R9710 OPEN
R9712 OPEN
R979 OPEN
R9713 OPEN
R9709 OPEN
Q9170 OPEN
R9707 OPEN
B901 CRT HOLDER
V901
TO FOCUS PACK
C901 1000
CRT SOCKET
V901A CRT SOCKET
C930 10000
P906
P908 1P
P907 1P
GND

D
E
F



CRT-D/B PD0641-3
TO DEF/POWER
HEATER
GND_DEF
NC
+200V
5P_2.5mm_1.5A_Beige
P917 PLUG 5P
R900 1RF3.9
L963 JP
4P_2.5mm_1.5A_Beige
3 20^ s/DIV, 2V/DIV B
3 B
TO GREEN P914A
200V
NC
GND_DEF
HEATER
P914B
C925 250V22
RW863Y472J
RW863Y472J
R951
R952
R920 1/6P2.2k
L925 6.8u
Q924 2SC3790E
D926 1SS244
D927 1SS244
R953 1/6P56
R930 1/6P2.2k
R923 1/2R100
L923 1.5u
Z903 KETSU
D936 1S1834
C926 100
R956 1/6P15
D924 1SS133
D925 1SS133
R954 1/6P56
D928 1SS244
D929 1SS244
Q921 2SC3942
172
8.6
8.1
R988 1/6P2.2k
Q925 2SA1480E
C922 16V100
C924 0.01
D921 1SS133
L924 12u
R924 KETSU
Q921A HEAT SINK
G921 KETSU
Q925A BRACKET
Q925B SCREW
C953 KETSU
Q921B SCREW
Q921C GREASE
D930 OPEN
D931 OPEN
R927 1/6P10
R9028 1/2R100
R9608 1/6P680
R9607 1/6P100
Q973 KTA1266Y
TO GREEN P916A
GAMMA
Vref
IK
9V
GND
B
P916B
6P_2.5mm_1.5A_Beige
Q9200 OPEN
R922 OPEN
C929 OPEN
R921 1/6P100
D922 KETSU
7.9
3.1
2.6
Q922 2SC3950E
R929 1/6P27
R925 1/6P18
C923 220
C9200 470
R9715 OPEN
R9820 1/6P33
R926 1/6P270
R928 1/6P68
R9602 OPEN
R9603 OPEN
R955 OPEN
R9601 OPEN
R9613 OPEN
Q975 OPEN
R9604 OPEN
R9605 OPEN
R9614 OPEN
C928 OPEN
R9606 OPEN
Q972 OPEN
Q971 OPEN
B903 CRT HOLDER
V903
TO FOCUS PACK
C921 1000
CRT SOCKET
V903A CRT SOCKET
P903
C936 10000
3P_5mm
P905 1P
P910 1P
GND

1 2 3 4

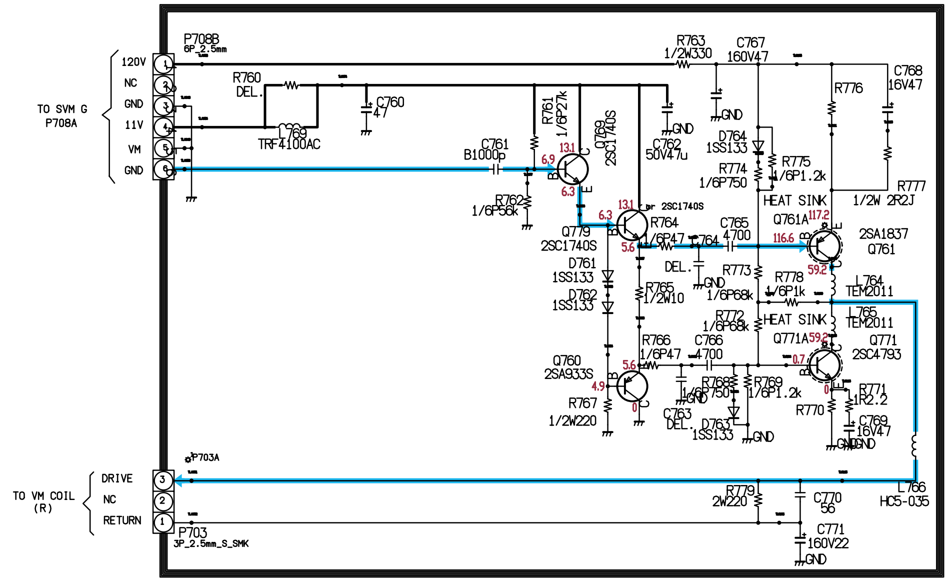


20^ s/DIV
2V/DIV
G
CRT-D/G
PD0641-2
TO RED P912A
200V
NC
NC
GND_DEF
HEATER
P912B
6P_2.5mm_1.5A_Beige
TO BLUE P914B
220V
NC
GND_DEF
HEATER
P914A
4P_2.5mm_1.5A_Beige
C915 250V22
GND
RW863Y472J
RW863Y472J
R941
R942
R948 1/6P2.2k
L915 6.8u
Q914 2SC3790E
D916 1SS244
D917 1SS244
R943 1/6P56
D914 1SS133
D915 1SS133
R944 1/6P56
D918 1SS244
D919 1SS244
R950 1/6P2.2k
R913 1/2R 100
L913 1.5u
Z902 KETSU
GND
B902 CRT_HOLDER
V902
TO FOCUS PACK
CRT SOCKET
C911 1000
V902A CRT SOCKET
C905 10000
GND
P901 PLUG 3P
3P_5mm
D913 1S1834
C917 100
C912 16V100
C913 0.01
Q911 2SC3942
8.6
161
8.1
R978 1/6P2.2k
L916 12u
Q916 2SA1480E
Q915A HEAT SINK
Q915B SCREW
R945 1/6P15
D912 1SS133
R914 KETSU
Q911A HEAT SINK
C911 KETSU
C943 KETSU
Q911B SCREW
Q911C GREASE
R9086 1/2R100
TO RED P915A
GAMMA
Vref
IK
9V
GND
B
GND
G
P915B
8P_2.5mm_1.5A_Beige
R912 OPEN
C919 OPEN
R911 1/6P100
3.4
7.9
2.6
Q912 2SC3950E
D911 KETSU
Q9190 OPEN
R9714 OPEN
R915 1/6P27
R919 1/6P18
R918 1/6P68
R9507 1/6P33
C9100 470
C914 220
R916 1/6P270
L961 10u
C961 16V1000
R967 1/6P680
KTA1266 Y
Q962 KTA1266Y
R987 1/6P100
Q961 KTC3198Y
R965 1/6P100
R964 1/6P3.3k
R966 1/6P330
C962 7L16V10u
R961 1/6P1.2k
R963 1/6P10
D961 OPEN
R962 1/6P470
P909
P911
TO BLUE P916B
GAMMA
Vref
IK
9V
GND
B
P916A
6P_2.5mm_1.5A_Beige

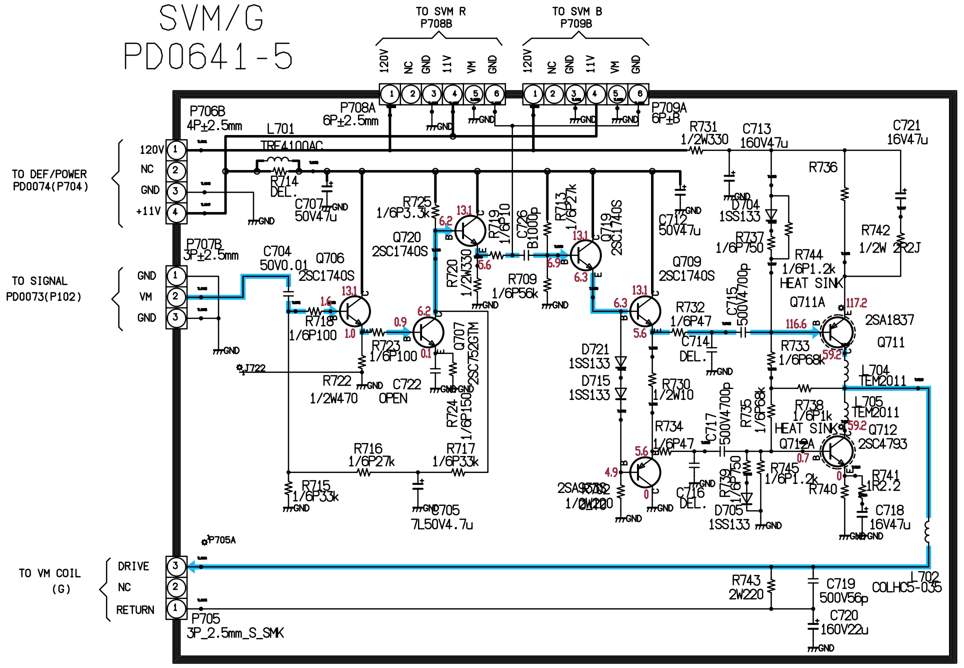
CRTSVM(CRT-DRIVE)
65HDX82 series

[SHEET-1/2]

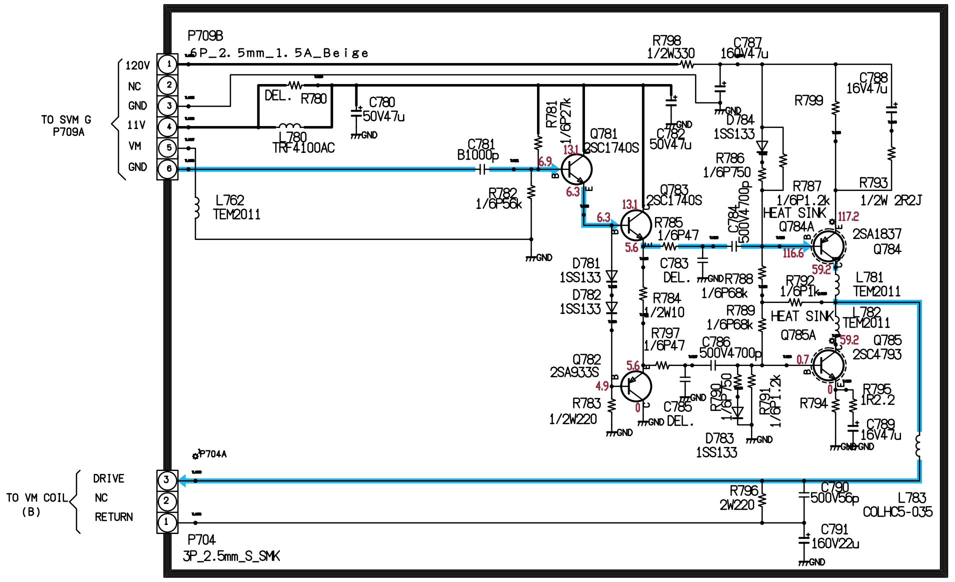
SVM/R
PD0641-4


TO SVM G P708A
120V
NC
GND
11V
VM
GND
P708B 6P_2.5mm
R760 DEL.
L769 TRF4100AC
C760 47
C761 B1000p
R762 1/6P56k
R761 1/6P27k
Q780 2SC1740S
Q779 2SC1740S
R763 1/2W330
C767 160V47
C762 50V47u
D764 1SS133
R774 1/6P750
R775 1/6P1.2k
R776
C768 16V47
R777 1/2W 2R2J
HEAT SINK
Q761A
2SA1837 Q761
R764 1/6P47
C765 4700
D761 1SS133
D762 1SS133
R765 1/2W10
R773 1/6P68k
R778 1/6P1k
L764 TEM2011
L765 TEM2011
R772 1/6P68k
Q771A
Q771 2SC4793
Q760 2SA933S
R766 1/6P47
C766 4700
R768 1/6P750
R769 1/6P1.2k
R771 1R2.2
C769 16V47
R770
R767 1/2W220
C763 DEL.
D763 1SS133
TO VM COIL (R)
DRIVE
NC
RETURN
P703A
P703 3P_2.5mm_S_SMK
R779 2W220
C770 56
C771 160V22
L766 HC5-035
GND

SVM/G
PD0641-5

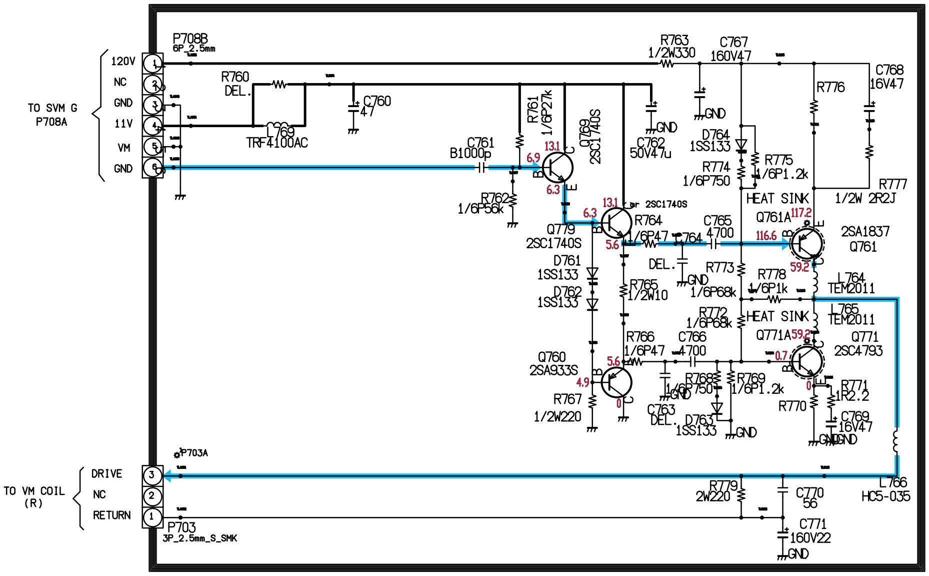

TO SVM R P708B
TO SVM B P709B
120V
NC
GND
11V
VM
GND
P706B 4P±2.5mm
P708A 6P±2.5mm
P709A 6P±8
TO DEF/POWER PD0074(P704)
120V
NC
GND
+11V
L701 TRF4100AC
R714 DEL.
C707 50V47u
R725 1/6P3.3k
Q720 2SC1740S
R719 1/6P10
C726 B1000p
R713 1/6P27k
Q719 2SC1740S
R731 1/2W330
C713 160V47u
C721 16V47u
R736
C712 50V47u
D704 1SS133
R737 1/6P750
R744 1/6P1.2k
R742 1/2W 2R2J
HEAT SINK
Q711A
2SA1837 Q711
TO SIGNAL PD0073(P102)
GND
VM
GND
P707B 3P±2.5mm
C704 50V0.01
Q706 2SC1740S
R718 1/6P100
R723 1/6P100
Q707 2SC7620TM
R720 1/2W330
R709 1/6P56k
Q709 2SC1740S
R732 1/6P47
C715 500V4700p
C714 DEL.
R733 1/6P68k
L704 TEM2011
L705 TEM2011
D721 1SS133
D715 1SS133
R730 1/2W10
R738 1/6P1k
HEAT SINK
Q712A
Q712 2SC4793
R722 1/2W470
C722 OPEN
R724 1/6P150
R716 1/6P27k
R717 1/6P33k
R715 1/6P33k
D705 7L50V4.7u
R734 1/6P47
C717 500V4700p
R735 1/6P68k
R745 1/6P1.2k
R740
R741 1R2.2
C718 16V47u
2SA933S
1/2W220
C716 DEL.
D705 1SS133
TO VM COIL (G)
DRIVE
NC
RETURN
P705A
P705 3P_2.5mm_S_SMK
R743 2W220
C719 500V56p
C720 160V22u
L702 COLHC5-035
GND

SVM/B
PD0641-6

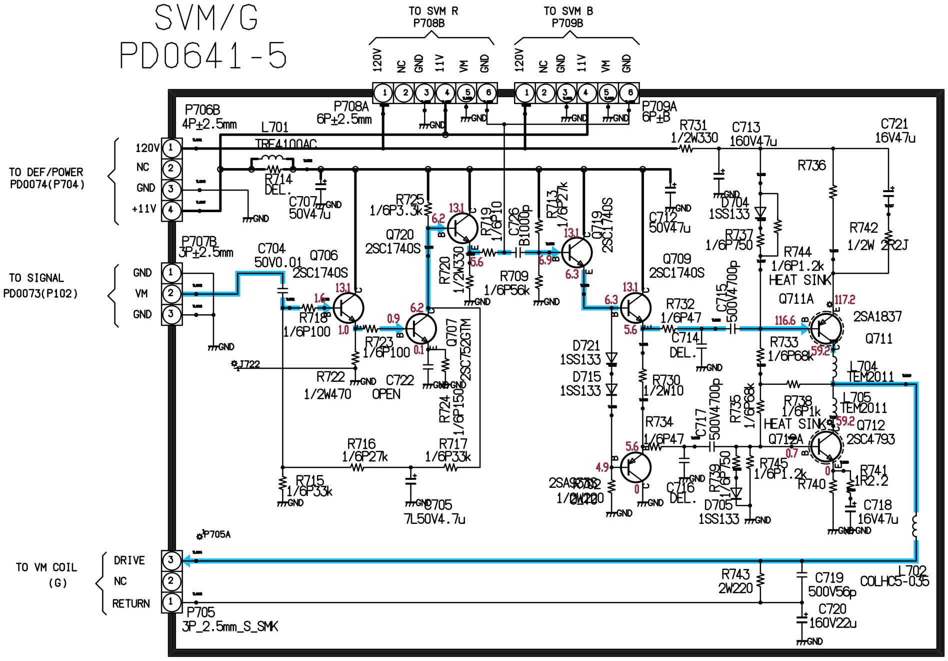

TO SVM G P709A
120V
NC
GND
11V
VM
GND
P709B 6P_2.5mm_1.5A_Beige
DEL. R780
C780 50V47u
L780 TRF4100AC
L762 TEM2011
C781 B1000p
R782 1/6P56k
R781 1/6P27k
Q781 2SC1740S
R798 1/2W330
C787 160V47u
C788 16V47u
C782 50V47u
D784 1SS133
R799
R786 1/6P750
R787 1/6P1.2k
R793 1/2W 2R2J
HEAT SINK
Q784A
2SA1837 Q784
Q783 2SC1740S
R785 1/6P47
C784 500V4700p
D781 1SS133
D782 1SS133
C783 DEL.
R788 1/6P68k
R792 1/6P1k
L781 TEM2011
L782 TEM2011
R784 1/2W10
R789 1/6P68k
HEAT SINK
Q785A
Q785 2SC4793
Q782 2SA933S
R797 1/6P47
C786 500V4700p
R790
R791 1/6P1.2k
R794
R795 1R2.2
C789 16V47u
R783 1/2W220
C785 DEL.
D783 1SS133
TO VM COIL (B)
DRIVE
NC
RETURN
P704A
P704 3P_2.5mm_S_SMK
R796 2W220
C790 500V56p
C791 160V22u
L783 COLHC5-035
GND

CRTSVM(SVM)
65HDX82 series
[SHEET-2/2]

SVM/R
PD0641-4


P708B
6P_2.5mm
120V
NC
GND
11V
VM
GND
TO SVM G
P708A
R760
DEL.
L769
TRF4100AC
C760
47
R761
1/6P27k
Q769
2SC1740S
C761
B1000p
R762
1/6P56k
R763
1/2W330
C767
160V47
C762
50V47u
GND
C768
16V47
R776
R777
1/2W 2R2J
D764
1SS133
R775
1/6P1.2k
R774
1/6P750
HEAT SINK
Q761A
2SA1837
Q761
Q779
2SC1740S
R764
1/6P47
C765
4700
L764
DEL.
D761
1SS133
D762
1SS133
R765
1/2W10
R773
1/6P68k
R778
1/6P1k
L764
TEM2011
L765
TEM2011
R772
1/6P68k
HEAT SINK
Q771A
Q771
2SC4793
Q760
2SA933S
R766
1/6P47
C766
4700
R768
1/6P750
R769
1/6P1.2k
R771
1R2.2
R770
R767
1/2W220
C763
DEL.
D763
1SS133
C769
16V47
P703A
DRIVE
NC
RETURN
TO VM COIL
(R)
P703
3P_2.5mm_S_SMK
R779
2W220
C770
56
L766
HC5-035
C771
160V22
13.1
6.9
6.3
6.3
5.6
117.2
116.6
59.2
59.2
0.7
0
5.6
4.9
0

SVM/G
PD0641-5


TO SVM R
P708B
TO SVM B
P709B
120V
NC
GND
11V
VM
GND
P706B
4P±2.5mm
P708A
6P±2.5mm
P709A
6P±B
120V
NC
GND
+11V
TO DEF/POWER
PD0074(P704)
L701
TRF4100AC
R714
DEL.
C707
50V47u
R731
1/2W330
C713
160V47u
C721
16V47u
R736
R742
1/2W 2R2J
P707B
3P±2.5mm
GND
VM
GND
TO SIGNAL
PD0073(P102)
C704
50V0.01
Q706
2SC1740S
R725
1/6P3.3k
Q720
2SC1740S
R719
1/6P10
C726
B1000p
R713
1/6P27k
Q719
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C712
50V47u
D704
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R737
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R744
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HEAT SINK
Q711A
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Q709
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OPEN
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C717
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1/6P68k
R738
1/6P1k
HEAT SINK
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1/6P33k
R715
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C716
DEL.
D705
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R745
1/6P1.2k
R740
R741
1R2.2
C718
16V47u
P705A
DRIVE
NC
RETURN
TO VM COIL
(G)
P705
3P_2.5mm_S_SMK
R743
2W220
C719
500V56p
C720
160V22u
L702
COLHC5-035
GND
13.1
1.6
1.0
0.9
6.2
0.1
6.2
13.1
5.6
6.9
6.3
13.1
6.3
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116.6
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59.2
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5.6
4.9
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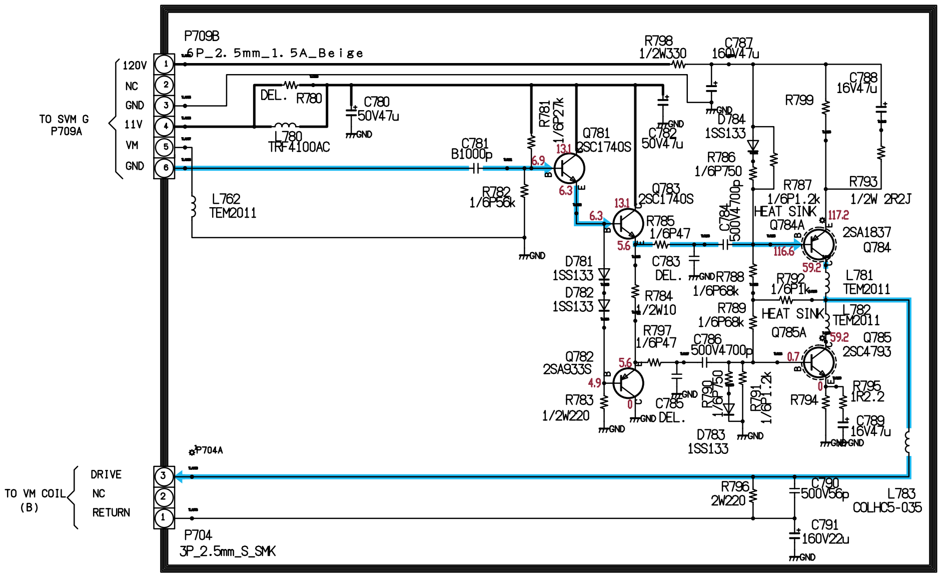
SVM/B
PD0641-6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GND
11V
VM
GND
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R780
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L780
TRF4100AC
C781
B1000p
R782
1/6P56k
L762
TEM2011
R781
1/6P27k
Q781
2SC1740S
C782
50V47u
Q783
2SC1740S
R785
1/6P47
C783
DEL.
D781
1SS133
D782
1SS133
R784
1/2W10
R797
1/6P47
Q782
2SA933S
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C785
DEL.
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R789
1/6P68k
C786
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1/6P750
R791
1/6P1.2k
D783
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R799
C788
16V47u
R793
1/2W 2R2J
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R795
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R796
2W220
C790
500V56p
C791
160V22u
L783
COLHC5-035
P704A
TO VM COIL (B)
DRIVE
NC
RETURN
P704
3P_2.5mm_S_SMK
GND
6.9
13.1
6.3
6.3
13.1
5.6
5.6
4.9
0
117.2
116.6
59.2
59.2
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0

A

B

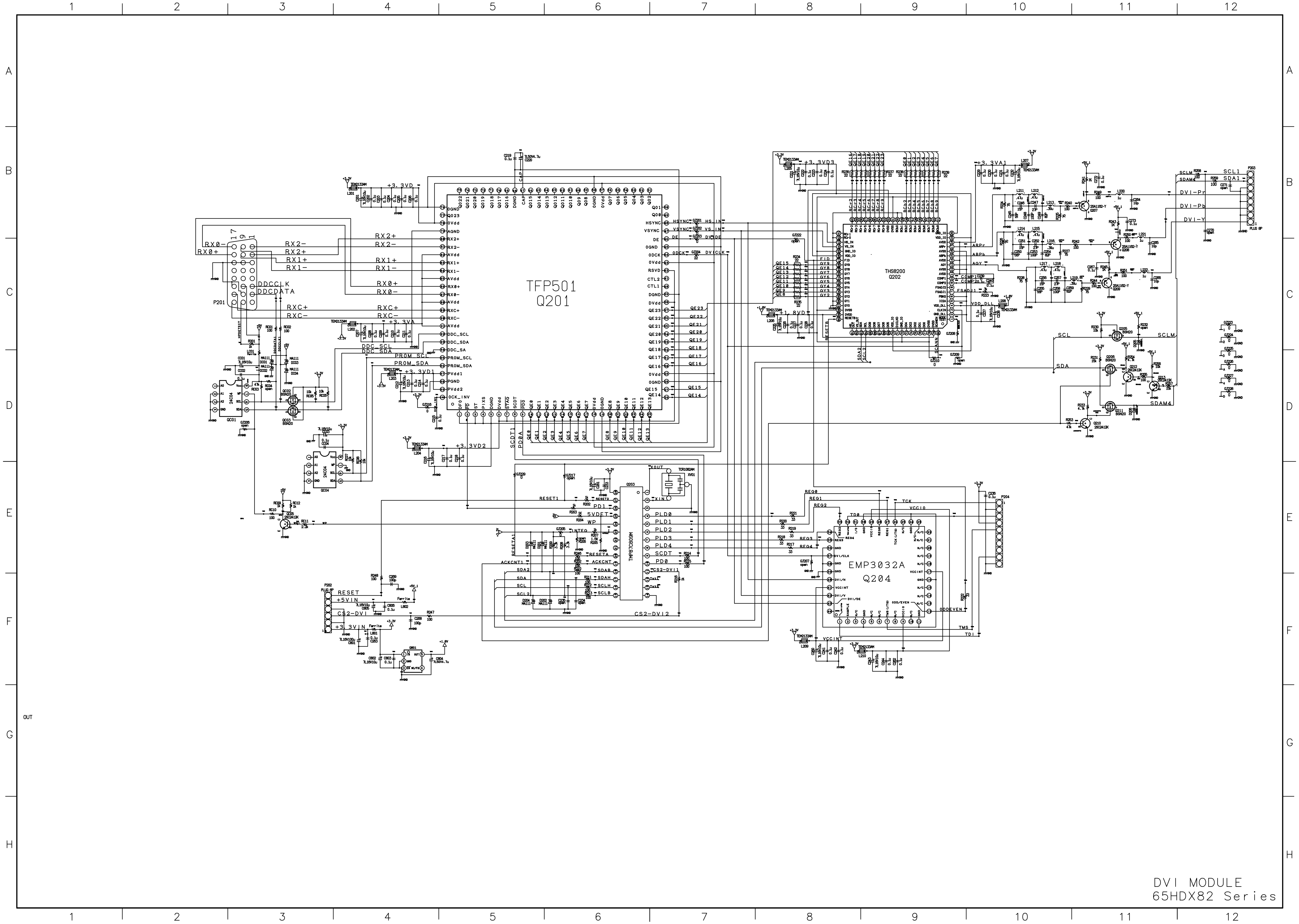
C

D

E

F

CRTSVM(SVM)
65HDX82 series
[SHEET-2/2]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Q201
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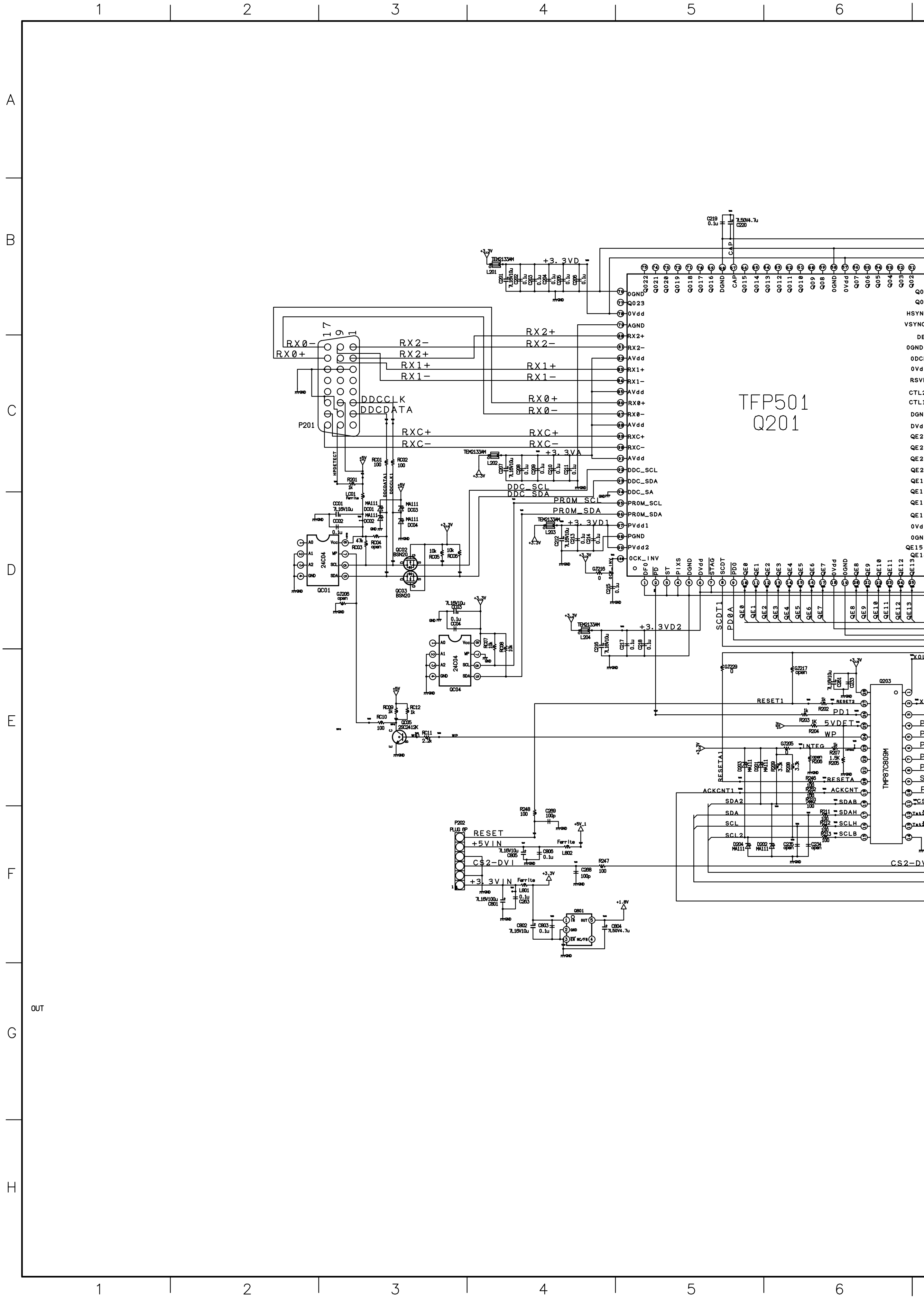
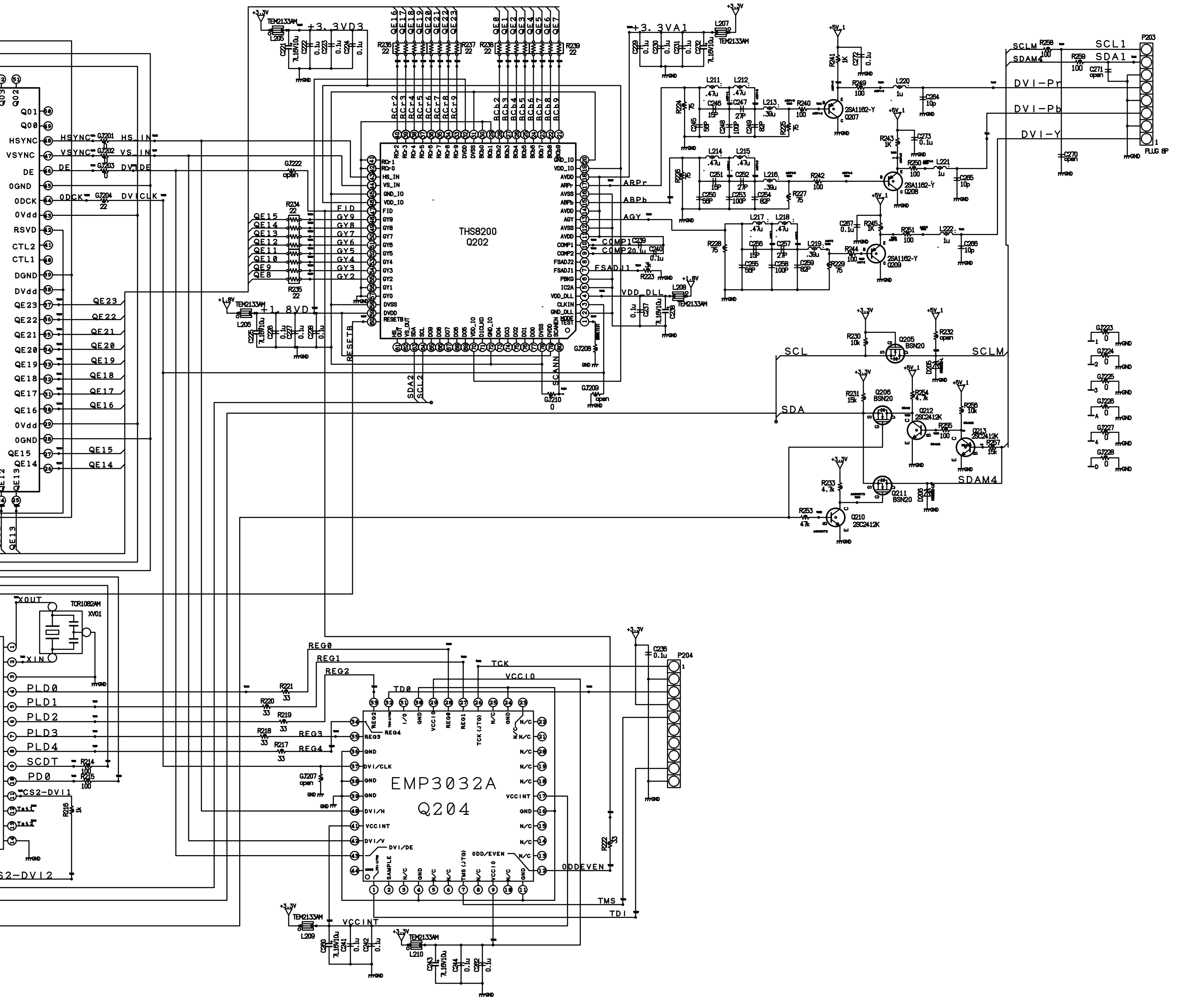
Q202
TMP87C809M
Q203
EMP3032A
Q204
P201
P202
P203
P204
24C04
QC01
QC04
RX0-
RX0+
RX2-
RX2+
RX1+
RX1-
RXC+
RXC-
DDCCLK
DDCDATA
DDC_SCL
DDC_SDA
PROM_SCL
PROM_SDA
+3.3VD
+3.3VA
+3.3VD1
+3.3VD2
+3.3VD3
+3.3VA1
+1.8VD
HSYNC
VSYNC
HS_IN
VS_IN
DVIDE
DVICLK
QE23
QE22
QE21
QE20
QE19
QE18
QE17
QE16
QE15
QE14
QE13
SCDT1
PD0A
RESET1
PD1
5VDET
WP
INTEG
RESETA
ACKCNT
SDAB
SDAH
SCLH
SCLB
CS2-DVI1
CS2-DVI2
PLD0
PLD1
PLD2
PLD3
PLD4
SCDT
PD0
XOUT
XIN
REG0
REG1
REG2
REG3
REG4
TCK
TDO
VCCIO
VCCINT
TMS
TDI
ODDEVEN
ARPr
ABPb
AGY
SCL
SDA
SCLM
SDAM4
SCL1
SDA1
DVI-Pr
DVI-Pb
DVI-Y
RESET
+5VIN
CS2-DVI
+3.3VIN
PLUG 8P
OUT

DVI MODULE
65HDX82 Series


TFP501
Q201
TMP87C809M
Q203
P201
P202
PLUG 6P
24C04
QC01
QC04
QC02
BSN20
QC03
QC05
2SC2412K
Q801
RX0-
RX0+
RX1+
RX1-
RX2+
RX2-
RXC+
RXC-
DDCCLK
DDCDATA
HPDETECT
DDC_SCL
DDC_SDA
PROM_SCL
PROM_SDA
+3.3VD
+3.3VA
+3.3VD1
+3.3VD2
CAP
OCK_INV
SCDT1
PD0A
RESET1
PD1
5VDET
WP
INTEG
RESETA
RESETA1
ACKCNT
ACKCNT1
SDAB
SDAH
SCLH
SCLB
SDA2
SDA
SCL
SCL2
RESET
+5VIN
CS2-DVI
+3.3VIN
TEM2133AM
Ferrite
OUT


THS8200
Q202
EMP3032A
Q204
+3.3VD3
+3.3VA1
+1.8VD
TEH2133AM
TCR1082AM
XV01
XOUT
XIN
HSYNC
VSYNC
DE
ODCK
HS_IN
VS_IN
DV_DE
DVICLK
QE15
QE14
QE13
QE12
QE11
QE10
QE9
QE8
QE23
QE22
QE21
QE20
QE19
QE18
QE17
QE16
FID
GY9
GY8
GY7
GY6
GY5
GY4
GY3
GY2
RESETB
SDA2
SCL2
SCANN
ARPr
ABPb
AGY
COMP1
COMP2
FSADJ1
VDD_DLL
2SA1162-Y
Q207
Q208
Q209
BSN20
Q205
Q206
Q211
2SC2412K
Q210
Q212
Q213
SCL
SDA
SCLM
SDAM4
SCL1
SDA1
DVI-Pr
DVI-Pb
DVI-Y
P203
PLUG 8P
P204
REG0
REG1
REG2
REG3
REG4
TCK
TD0
VCCIO
VCCINT
ODDEVEN
TMS
TDI
PLD0
PLD1
PLD2
PLD3
PLD4
SCDT
PD0
CS2-DVI1
CS2-DVI2
GJ223
GJ224
GJ225
GJ226
GJ227
GJ228

DVI MODULE
65HDX82 Series

TOSHIBA

FILE NO. 020-200218

SERVICE MANUAL

COLOR TELEVISION

N2PSP Chassis

65HDX82

(TAC0270)

PUBLISHED IN JAPAN, Jul. 2002 So

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SPECIFICATIONS .... END

APPENDIX:

CIRCUIT DIAGRAM

CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE “X-RAY RADIATION PRECAUTION”, “SAFETY PRECAUTION” AND “PRODUCT SAFETY NOTICE” INSTRUCTIONS BELOW.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is (A) kV at zero beam current (minimum brightness) under a 120V AC power source. The high voltage must not, under any circumstances, exceed (B) kV.

   Refer to table-1 for high voltage (A), (B).
   (See SETTING & ADJUSTING DATA on page 19)

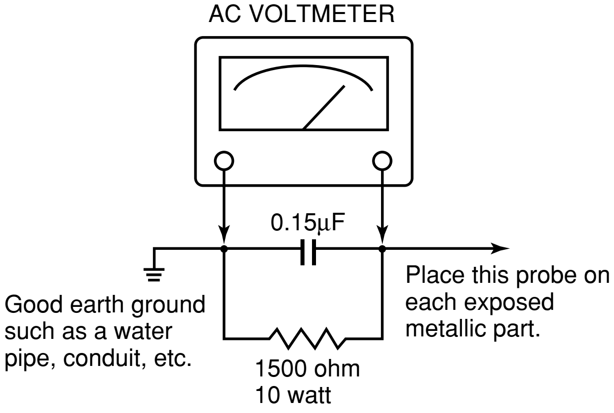
   Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. This receiver is equipped with a Fail Safe (FS) circuit which prevents the receiver from producing an excessively high voltage even if the B+ voltage increases abnormally. Each time the receiver is serviced, the FS circuit must be checked to determine that the circuit is properly functioning, following the FS CIRCUIT CHECK procedure in this manual.
3. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
4. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation Transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
4. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, screwheads, metal overlays, control shafts etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner:

   Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15 µF, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0.15 µF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.3 volts rms. This corresponds to 0.2 milliamp. AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.


AC VOLTMETER
0.15µF
Good earth ground such as a water pipe, conduit, etc.
Place this probe on each exposed metallic part.
1500 ohm
10 watt

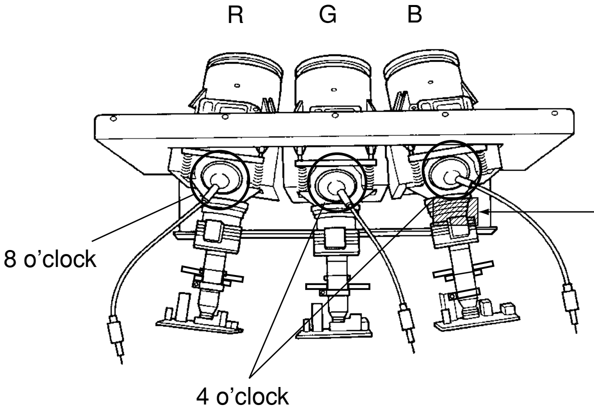
PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.

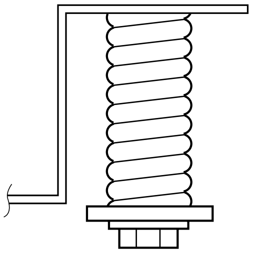
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

CRT ASSEMBLY REPLACEMENT AND MOUNTING

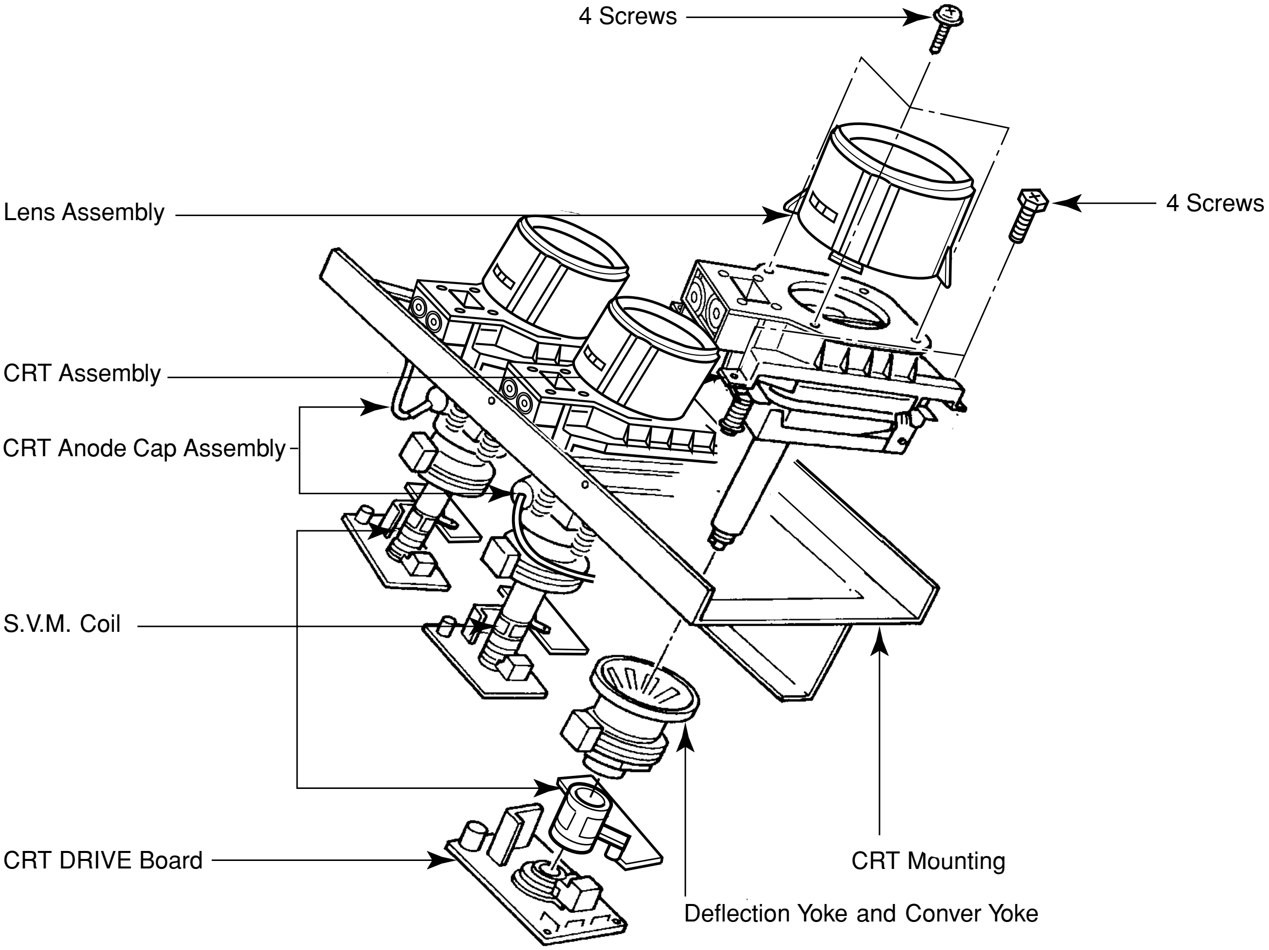
CAUTION : DO NOT LOOSEN THE HEX HEAD BOLTS WITH SPRINGS (12 PCS), BECAUSE THOSE ARE FOR SEALING OF CRT COOLANT.


R
G
B
8 o'clock
4 o'clock

Attention Serviceman



The Hex Head Bolts with Springs. (see sketch) used on CRT assembly, are "NOT" Adjustment Screws DO NOT LOOSEN-FLUID LEAKAGE WILL OCCUR.


4 Screws
4 Screws
Lens Assembly
CRT Assembly
CRT Anode Cap Assembly
S.V.M. Coil
CRT DRIVE Board
CRT Mounting
Deflection Yoke and Conver Yoke

Lens and Neck Components View

TO REMOVE CRT (Same procedure for R, G, B)

1. Remove CRT DRIVE Board, S. V. M. COIL and DEF. YOKE from CRT.
2. Remove Lens Assembly.
3. Detach CRT Anode Cap from CRT.
4. Remove CRT Assembly from CRT Mounting.

CRT REPLACEMENT (Same procedure for R, G, B)
Reverse the removal procedures except the followings.

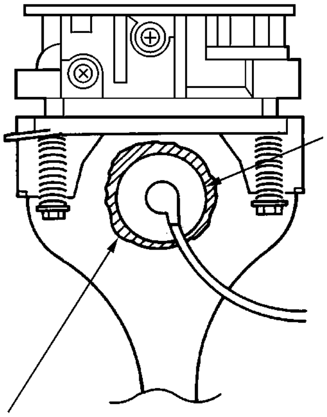
1. Anode Cable should be replaced with new one. See “SERVICING PRECAUTIONS” shown below.
2. Install silicon (T461B) to the CRT, replace the Anode cable and put enough silicon again on around the Anode Cap as illustrated.

CAUTION: Align the Anode cable as illustrated on page 4.

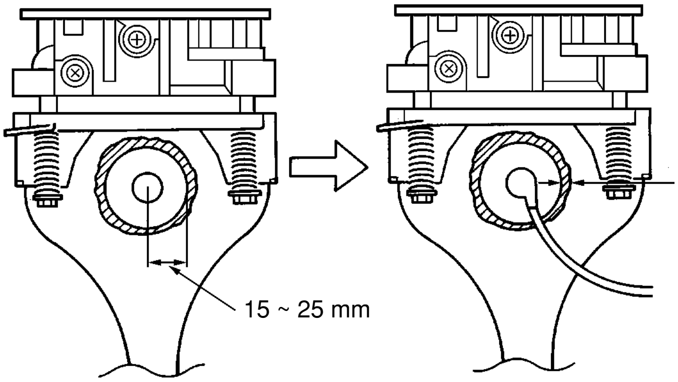
ADJUSTING PROCEDURE IN REPLACING CRT

1. R.G.B. FOCUS ADJUSTMENT (page 7.)
2. PICTURE TILT ADJUSTMENT (page 7.)
3. USER CONVERGENCE CENTER CHECK (See owner's manual.)
4. CENTERING ADJUSTMENT (page 7.)
5. CONVERGENCE ADJUSTMENT (page 14.)
6. WHITE BALANCE ADJUSTMENT (page 13.)

Adjustments are complete.

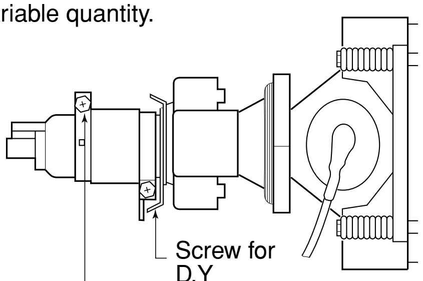


Silicon
(On shaded area)
TSE3843W #23960136



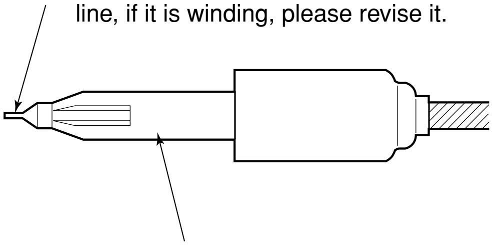
SERVICING PRECAUTIONS

- ■ Do not use a magnetized screw driver for screws of Deflection Yoke and Velocity Modulation Coil to avoid magnetization of electron gun. Magnetization of electron gun will degrade basic function and result in unbalance of right and left shift of user static convergence, and result in no variable quantity.



- ■ When replacing the anode cap assembly (CRT) or anode lead assembly (F.B.T.), remove the anode lead holder from old one and attach the holder again to new anode lead.

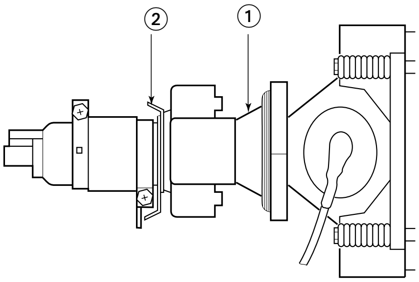
- ■ Check the point of anode lead in a straight line, if it is winding, please revise it.



WARNING : BEFORE SERVICING THIS CHASSIS, READ THE “X-RAY RADIATION PRECAUTION”, “SAFETY PRECAUTION” AND “PRODUCT SAFETY NOTICE” ON PAGE 3 OF THIS MANUAL.

PICTURE TUBE COMPONENTS ADJUSTMENT

DESCRIPTION OF NECK COMPONENTS



① Deflection yoke and convergence yoke
The position on the neck is required most front (CRT funnel side) and the screw is fastened after rotating yoke adjusting picture tilt.

② Centering magnet
After adjusting picture tilt, picture position is finally fixed by this magnet.
In order to get maximum margin of user convergence control for center of screen, this magnet have to be used for center convergence adjustment.

PREPARATION
Operate the receiver for at least 5 minutes.

R, G, B FOCUS ADJUSTMENT

1. Before adjusting the R, G, B FOCUS, remove the 4 screws of Lens Assembly which is fixed on the CRT Assembly. (See page 4.)
   Then turn around the Lens Assembly by 180˚ to adjust the fastening screw (Fig. a) and fasten the 4 screws to secure Lens Assembly.
2. Select the adjustment mode. (See page 10.)
3. Press “7” button to display the built-in cross-hatch.
4. Press “0” and “RTN” buttons to make the picture a single Red color.
   100 button .... to erase Red color
   0 button .... to erase Green color
   RTN button .... to erase Blue color.
5. Loosen the fasten screw and adjust Red lens focus to best focusing point of picture center. Then fasten the screw. (See Fig. a.)

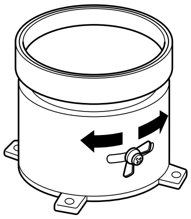


Fig. a

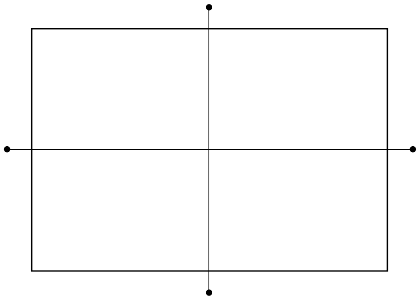
6. Adjust FOCUS VR “R” of FOCUS PACK to find best focusing point of picture center.
7. Repeat steps 3 to 5 for Green and Blue colors.

TILT ADJUSTMENT

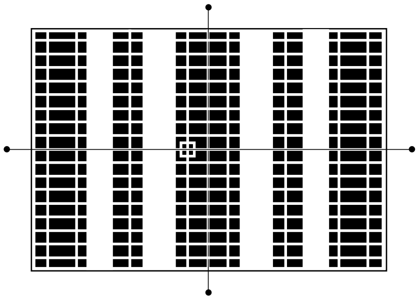
Rotate R, G, B deflection yoke so that picture becomes horizon, then fasten screw.

CENTERING ADJUSTMENT

1. Stretch a thread between two center of screen edge (top and bottom, left and right).

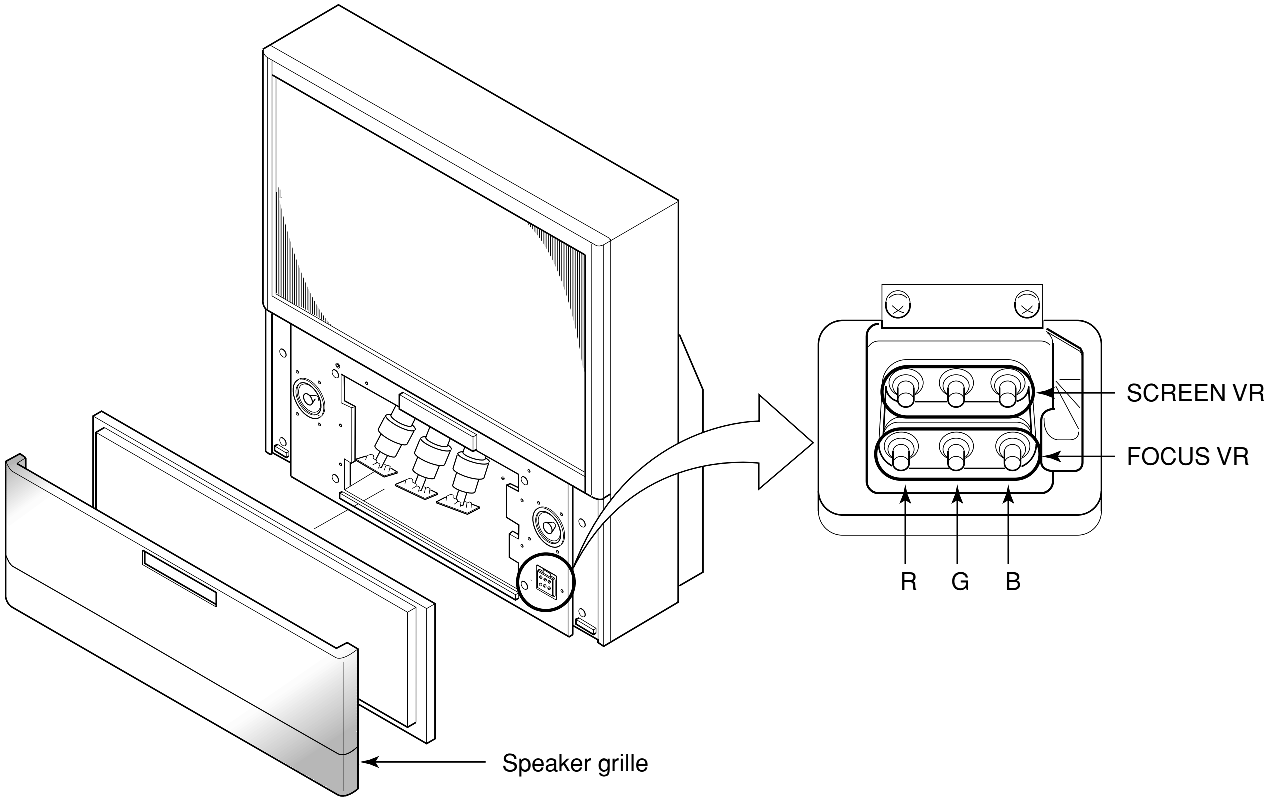


2. Receive NTSC.
   Then select SERVICE MODE. (See Page 10.)
3. Select CONVERGENCE ADJUSTING mode, and press "7" button to display the built-in cross-hatch pattern.
   Move Cursol and recognize horizontal line indicated Y:4.
   This line is vertical center. Push "9" button to display the vertical stripes, and recognaize horizontal center.



4. Perform VCEN adjustment. (See page 12.)
5. Adjust G centering magnet so that the cross-bar pattern center comes to screen center.
6. Perform HEIGHT adjustment . (See page 13.)
7. Perform VERT. LINEARITY adjustment.
8. Perform WIDTH adjustment. (See page 12.)
9. Check whole quality of green line.
10. Adjust R, B centering magnet so that the cross-bar pattern center comes to screen center.

LOCATION OF SCREEN AND FOCUS VR'S


SCREEN VR
FOCUS VR
R
G
B
Speaker grille

REPLACEMENT OF THE CRT

Service parts are provided for each R, G and B.
The contents of the parts are as follows.

	R	G	B
HITACHI CRT	23008174	23008175	23008176

REPLACEMENT OF HIGH VOLTAGE CABLE

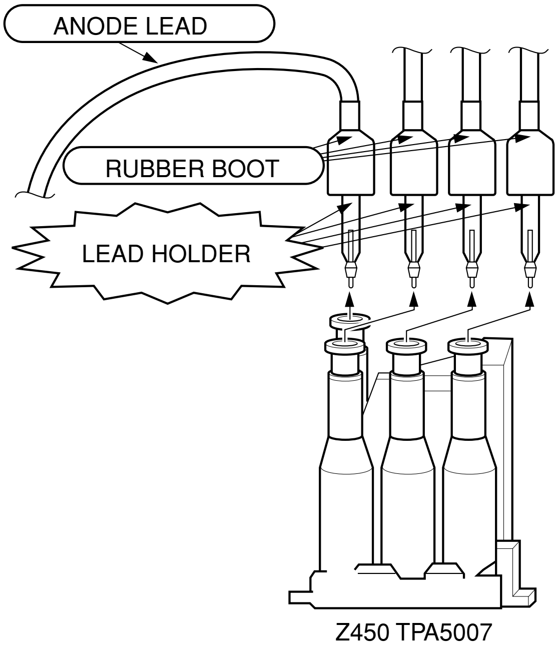

ANODE LEAD
RUBBER BOOT
LEAD HOLDER
Z450 TPA5007

Fig. a

1. When replacing Anode Lead or Anode Cap with new one, remove Lead Holder from old lead as shown in figure below, and put it on new lead. Do not throw away Lead Holder.

NOTE : THE LEAD HOLDER IS ATTACHED TO TPA5007 (Z450), BUT IS NOT ATTACHED TO ANODE LEAD AND ANODE CAP. RUBBER BOOT IS ATTACHED TO ANODE LEAD AND ANODE CAP.

2. Detaching Lead Holder

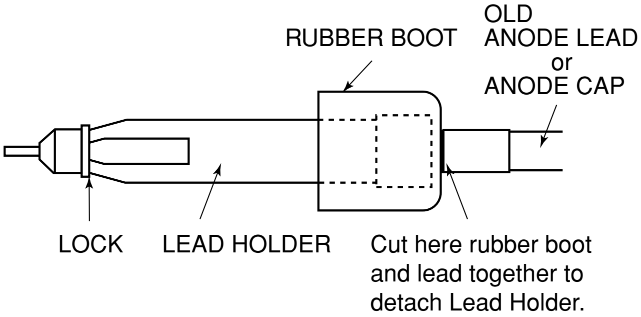

RUBBER BOOT
OLD
ANODE LEAD
or
ANODE CAP
LOCK
LEAD HOLDER
Cut here rubber boot
and lead together to
detach Lead Holder.

Fig. b

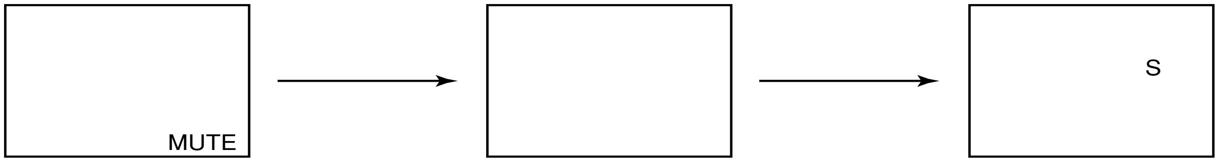
SERVICE MODE

1. ENTERING TO SERVICE MODE

1) Press MUTE button twice on Remote Control.

2) Press MUTE button again to keep pressing.

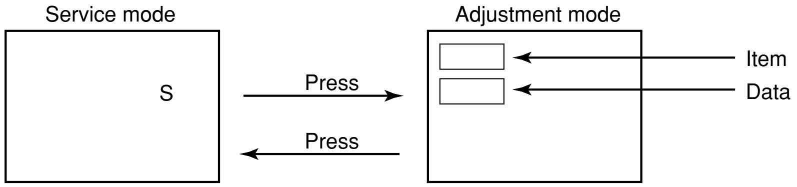
3) While pressing the MUTE button, press MENU button on TV set.



(Service mode display)

2. DISPLAYING THE ADJUSTMENT MENU

1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

Screen adjustment mode ON/OFF:	TV (ANT)/VIDEO button (on TV)
Selection of the adjustment items :	Channel ▲/▼ (on TV or Remote)
Change of the data value :	Volume ▲/▼ (on TV or Remote)
Adjustment menu mode ON/OFF :	MENU button (on TV)
Initialization of the memory (QA02) :	RECALL+Channel button on TV (▲)
Initialization of the self diagnostic data:	RECALL+Channel button on TV (▼)
"RCUT" selection :	1 button
"GCUT" selection :	2 button
"BCUT" selection :	3 button
"SCNT" selection :	4 button
"SCOL" selection :	5 button
"TNTC" selection :	6 button
Convergence adj :	7 button
Self diagnostic display :	9 button

4. SELECTING THE ADJUSTING ITEMS

1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2. (▼ button for reverse order)

Refer to table-2 for preset data of adjustment mode.
(See SETTING & ADJUSTING DATA on page 19)

5. ADJUSTING THE DATA

1) Pressing of VOLUME ▲ or ▼ button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

1) Pressing POWER button to turn off the TV once.

■ INITIALIZATION OF MEMORY DATA OF QA02

After replacing QA02, the following initialization is required.

1. Enter the service mode, then select any register item.
2. Press and hold the RECALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been complated.
3. Check the picture carefully. If necessary, adjust any adjustment item above. Perform “Programming Channel Memory” on the owner's manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

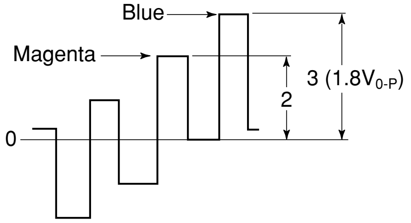
7. SELF DIAGNOSTIC FUNCTION

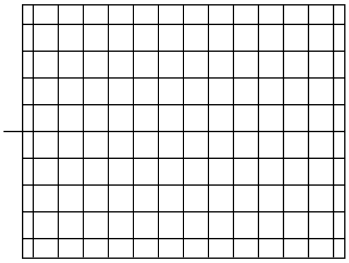
1) Press “9” button on Remote Control during display of adjustment menu in the service mode. The diagnosis will begin to check if interface among IC’s are executed properly.
2) During diagnosis, the following displays are shown.

```
     SELF CHECK
①───NO. 23 * * * * * *
②───POWER      : 000
③───BUS LINE   : OK
④───BUS CONT : OK
⑤───BLOCK : MAIN  SUB
⑥───SET ID : 01
⑦───EEP VER : 02
⑧───OPT1 : 05       OPT2 : 70
```

① Part number of microprocessor (QA01)
② Operation number of protection circuit (current limiter) . . . . “000” is normal.
③ BUS line check ─── “OK” .... Normal
“SCL-GND” or “NG” .... SCL-GND short circuit
“SDA-GND” or “NG” .... SDA-GND short circuit
“SCL-SDA” or “NG” .... SCL-SDA short circuit
④ BUS line ACK (acknowledge) check
“OK” .... Normal
Display of Location Number . . . . NG
(Display example)
“QA02 NG”, “H001 NG”, “Q501 NG” etc.
Note: The indication of failure place is only one place though failure places are plural. When repair of a failure place finishes, the next failure place is indicated. (The order of priority of indication is left side.)
⑤ Sync. signal check ─── Green display ..... Normal
Red display .... NG
MAIN .... Main sync
SUB .... Sub sync (when turn on the PIP)
⑥ ID code for TV Set
⑦ Version of "EEP"
⑧ Data for "OPT"

ELECTRICAL ADJUSTMENT

ITEM	ADJUSTMENT PROCEDURE
ƒH (free-running frequency of Hor. oscillator)	1. Receive NTSC signal. 2. Short the terminal "TP $\boxed{+9V}$ " and the terminal " TP (Free run) " on the signal board with a jumper wire. 3. Connect the probe of frequency counter to the lead of R426 and GND. 4. Adjust the frequency to "33.75±0.2 kHz" by turning R4034 on DPC Board. 5. Disconnect the shorted wire, then confirm that the picture is synchronized.
VERTICAL POSITION (VCEN)	1. Receive NTSC signal. 2. Connect he probe of digital voltmeter to TP-V and TP-G on SIGNAL Board. 3. Call up the adjustment mode display, then select the item VCEN. 4. Press the VOLUME ▲ or ▼ button to get the voltage 0±10 mV.
PICTURE POSITION (HPOS)	1. Receive NTSC signal. 2. Call up the adjustment mode display. 3. Select the item "HPOS", and adjust the data to "80H". 4. Adjust the picture position alternately by turning CENTERING MAGNETS for proper picture position. 5. Check the picture with off-air signal.
WIDTH (WID)	1. Receive NTSC signal. 2. Select the "FULL" mode by PIC SIZE button on Remote Control. 3. Call up the adjustment mode display, then select the item WID. 4. Press the VOLUME ▲ or ▼ button to get the picture so that left and right eddes of video signal begin to lack. 5. Press the VOLUME ▲ button to advance the data by 8 steps. NOTE: Check the horizontal picture position is correct.
SUB-BRIGHTNESS (BRTC)	1. Receive the air signal or aux Video signal. 2. Enter sports mode on user menu. 3. Enter the service mode, then select "**BRTC**" register. 4. Adjust the data to set dark area of picture to proper level.
SUB-COLOR (SCOL)	1. Receive color-bar signal from color-bar generator. 2. Adjust the BRIGHTNESS and CONTRAST to the center (RESET status). 3. Connect oscilloscope to TP501on the MAIN board. 4. Enter the service mode, then select "**SCOL**". 5. Adjust the data value to achieve $1.8V_{0\text{-}p}$ of blue bar on scope. 6. Check the picture with off-air signal. 

ITEM	ADJUSTMENT PROCEDURE
HEIGHT (HIT)	1. Receive NTSC signal. 2. Select the "FULL" mode by PIC SIZE button on Remote Control. 3. Call up the adjustment mode display and select the item HIT. 4. Press the VOLUME ▲ or ▼ button to get the picture so that top and bottom of video signal begin to lack. 5. Press the VOLUME ▲ button to advance the data by 8 steps. Note: Check the vertical picture position is correct. Adjust the data of height after vertical linearty.
VERTICAL LINEARITY (VLIN) (FULL mode only)	1. Receive cross-hatch pattern. 2. Call up the adjustment mode display, then select the item **VLIN**. 3. Press the VOLUME ▲ or ▼ button to obtain the picture of the best linearity. 4. Then readjust the item HIT. 
WHITE BALANCE (RCUT) (GCUT) (BCUT) (RDRV) (BDRV)	1. Press RESET button on TV or remote hand set. 2. Call up the adjustment mode display, then adjust the data of items **RCUT**, **GCUT** and **BCUT** to “80”. 3. Press TV (ANT)/VIDEO button on TV. 4. Gradually rotate R, G and B SCREEN volume of FOCUS PAC (page 9) clockwise or counterclockwise until the raster appears slightly on the CRT through the each lens, and leave them. (Look into the lens in order to check the raster.) 5. Press TV (ANT)/VIDEO button on TV again. 6. Exit from service mode. 7. Receive white laster pattern signal, and adjust the contrast to the minimum to make white picture to low light. 8. Adjust the data of items **RCUT**, **GCUT** and **BCUT** for low light area. 9. Adjust the contrast to the maximum to make white picture to high light. 10. Adjust the data of items **RDRV** and **BDRV** Controls for proper white-balanced picture in high light area. 11. Check the white balance in both low and high light areas. If necessary, perform again steps from 7 to 9.

CONVERGENCE ADJUSTMENT

Adjust convergence from center to circumference in order.

KEY FUNCTION IN THE CONVERGENCE ADJUSTMENT:

Lord BACK UP DATA:	1 button
Up :	2 button
Selet Green color:	3 button
Left :	4 button
Blinking of cursor ON/OFF:	5 button
Right:	6 button
Adjust mode ON/OFF:	7 button
Down:	8 button
Vertical stripe ON/OFF	9 button
Erase Green line:	0 button
Erase Red line:	100 button
Erase Blue line:	ENT button

Note:
Adjusting procedure in replacing convergence board.

1. User convergence center check. Make sure the best convergence setting is about the center of adjustable range.
2. CENTERING ADJUSTMENT
3. PICTURE POSITION ADJUSTMENT
4. HIT, WID ADJUSTMENT
5. CONVERGENCE ADJUSTMENT
6. Execute TOUCH FOCUS following instructions displayed on the screen after finishing CONVERGENCE ADJUSTMENT.
7. If TOUCH FOCUS ERROR is displayed after finishing TOUCH FOCUS, the method of CROSS-HATCH PATTERN after CONVERGENCE adjustment is different from what is exhibited on the right figure, or HARDWARE is out of order.

1. Select the adjustment mode following the steps on page 10.

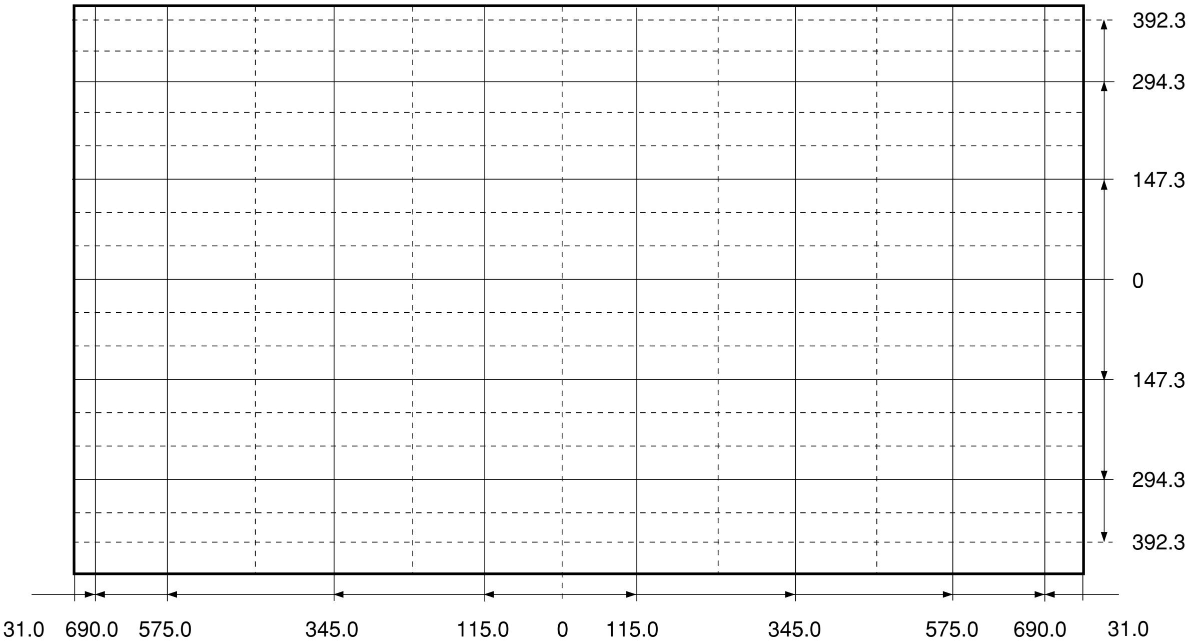
RCUT
40H

2. Press “7” button to display the built-in cross-hatch pattern and press "9" button to display the vertical stripes.
3. If there is need to load BACKUP DATA, push "1" button, and then push "ENTER" button according to following message. Convergence become adjusted state at factory by this action.
   If there is no need, pass this process.
   Never to use this function to new convergence board, because BACKUP DATA is not exist.
4. Adjustment around cursor can be done.
   The pattern includes three colors (R, G, B).
   The cursor should be blinking in Red.
   This means that the Red color is adjustable.
5. Press “3” button to select Green color to be adjusted.
6. Press “5” button to stop the blinking of cursor.
7. Press “2 (up)”, “8 (down)”, “4 (left)” or “6 (right)” to obtain the correct cross-hatch pattern as above.
   If necessary, the specified color line can be erased from the screen.
   100 button .... to erase Red line
   0 button .... to erase Green line
   CH RTN button .... to erase Blue line
8. Press “5” button to make the cursor blinking.
9. Press “2”, “8”, “4”, “6” buttons to move the cursor to other point to be adjusted.
10. Repeat steps 6 to 9.
11. Repeat steps 5 to 10 to adjust Red and Blue colors.
    Converge the selected color line into the Green line.
12. Press “7” button to memorize the adjusted states.
    At this time, picture changes for about 1 second.
13. Press the TOUCH FOCUS button when "PLEASE PUSH TOUCH FOCUS" is displayed on the screen.
14. TOUCH FOCUS CALIBRATION MODE is executed.
15. It returns to the normal screen after displaying "CALIBRATION FINISHED".

Adjusting Dimension of Each Picture Screen (16:9 screen size:) 65 inches

(1) HD (1080I/NTSC)

65 inches 16:9 Screen Size:horizontal 1442mm :Vertical 810mm
(QH173, 16KB, CHIP1, UFO-*,BANK1) Vspan49.1mm Hspan115.0


392.3
294.3
147.3
0
147.3
294.3
392.3
31.0
690.0
575.0
345.0
115.0
0
115.0
345.0
575.0
690.0
31.0

NOTES

In many cases, color misconvergence may be corrected by returning HIT and WID data in main deflection side to initial adjusting values. Following cases will surely require readjustment of convergence.

CRT REPLACEMENT

When CRT is replaced, main deflection readjustment and color matching are required.
Perform following procedures.

1. Replace two CRT's of blue and red.
2. Perform horizontal adjustment for blue and red yokes on base of green CRT data. Mount yoke and velocity mod. coil alignment, pushing towards CRT without gap.
3. Adjust alignment of blue and red. (Refer Alignment adjustment for details.)
4. Rotating centering magnet, adjust CRT centers of red and blue to CRT center of green.
   (Picture position adjustment)
5. Adjust HIT and WID data of main deflection, and decide data at the most precise screen comparing to green data.
6. Adjust convergence of screen picture for color matching. Do not move green one at this time.
7. After convergence adjustment of screen picture finishes, replace green CRT.
   For green CRT as well, repeat steps 2 to 5 above on bases of red and blue color matching to adjust convergence.
8. Execute TOUCH FOCUS following instructions displayed on the screen after finishing convergence adjustments of all the colors.
   Note: Press button "7" again after "PLEASE PUSH TOUCH FOCUS" has been displayed. Then, TOUCH FOCUS will not be executed, and the current state of convergence will be displayed.

REPLACING CONVERGENCE UNIT

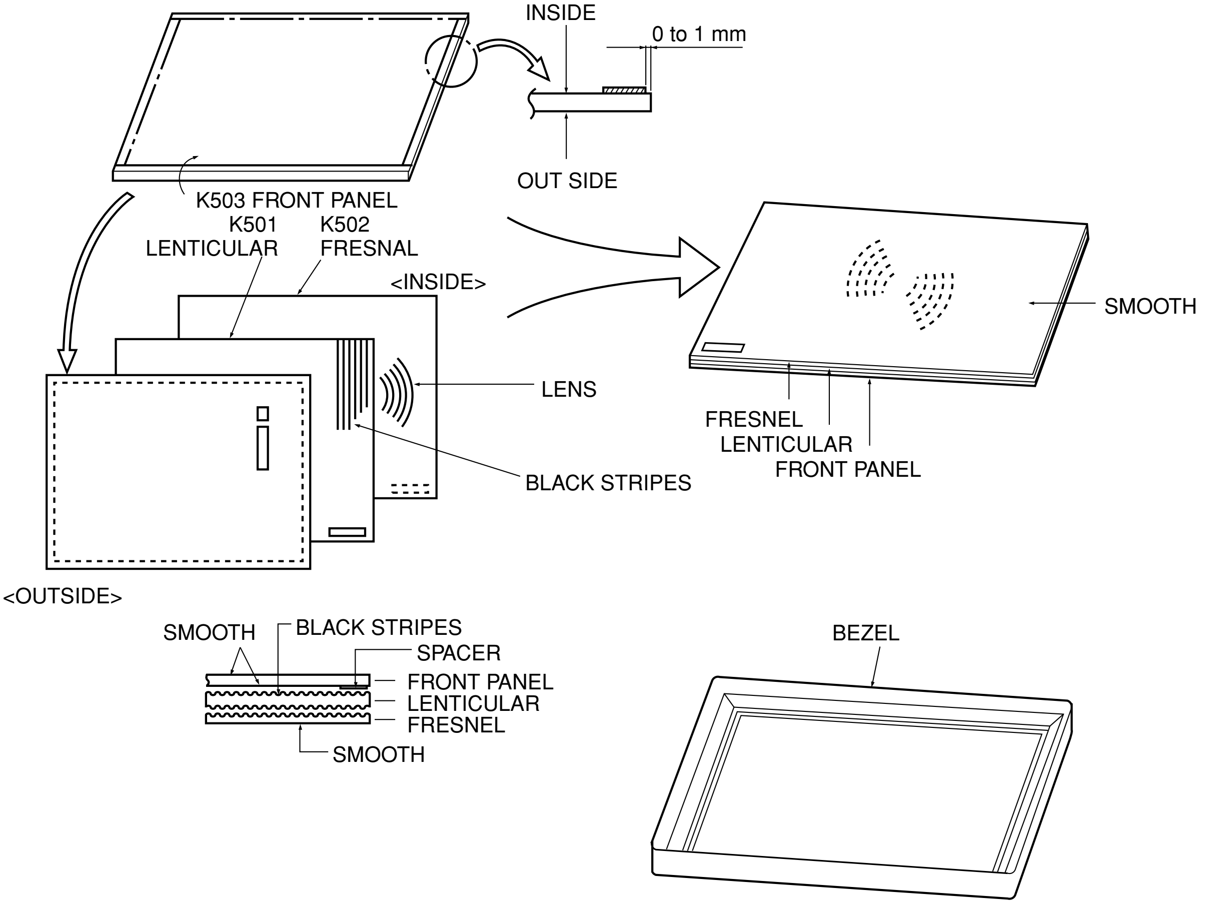
When replacing convergence unit, picture screen require readjustment basically, but the following method allows process be reduced considerably.

1. Replace the memory (Q713) on defective unit with memory on new unit. Mounting the unit on the SET after the above working realizes picture screen before replacement immediately.
2. Mount unit which has old memories, on SET and turn it on. Screen shows whole picture looks like straightly shifted towards vertical or horizontal direction.
3. Adjust again centers of green, red and blue with centering magnets.
4. Check picture screen for slight disparity of color and picture size. If necessary, add some adjustments of main deflection and color matching of convergence.
5. Execute TOUCH FOCUS following instructions displayed on the screen after finishing convergence adjustments of all the colors.
   Note: Press button "7" again after "PLEASE PUSH TOUCH FOCUS" has been displayed. Then, TOUCH FOCUS will not be executed, and the current state of convergence will be displayed.

SCREEN AND MIRROR ALIGNMENTS

ASSEMBLING OF FRONT SCREEN

MOUNTING OF FRONT SCREEN


INSIDE
0 to 1 mm
OUT SIDE
K503 FRONT PANEL
K501
LENTICULAR
K502
FRESNAL
<INSIDE>
LENS
BLACK STRIPES
<OUTSIDE>
SMOOTH
FRESNEL
LENTICULAR
FRONT PANEL
SMOOTH
BLACK STRIPES
SPACER
FRONT PANEL
LENTICULAR
FRESNEL
SMOOTH
BEZEL

CAUTION : Do not hold the optical system parts (lens and mirror) with bare hand to avoid finger-prints on the surface of those parts.

HOW TO CLEAN LENS AND MIRROR

1. Be sure to remove sand dust with an air brush, etc.
2. When it is stained slightly, breathe upon it and wipe away with the specified cleaning cloth.
   For other stains than the above, wipe the stains away with the specified cloth into which a cleaning liquid has been soaked.

Cleaning liquid.................... **LENS LUSTER** (Manufactured by Edmund Scientific Co.), etc.

HOW TO CLEAN SCREEN

When cleaning the screen, use a soft cloth so as not to damage the screen.

1. Wipe the screen with a dry cloth to remove moisture on the screen.

Note : Absolutely do not use detergent, water, alcohol, benzine, thinner, etc. for cleaning in order not to wipe away the black print on the surface.

CIRCUIT CHECKS

HIGH VOLTAGE CHECK

CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST to minimum (zero beam current).
3. High voltage must be measured below (B) kV.

   Refer to table-1 for high voltage (B).
   (See SETTING & ADJUSTING DATA on page 19)
4. Vary the BRIGHTNESS to both extremes to be sure the high voltage does not exceed the limit under any conditions.

CAUTION:

When the following parts fail, check the High Voltage after replacing.

Location No.	Name	Descriptions
		65"
T461	Flyback	TFB3092AD
C407	Capacitor	4700pF, ±3%
C408	Capacitor	8200pF, ±5%
C441	Capacitor	4700pF, ±3%
C432	Capacitor	8200pF, ±5%
C433	Capacitor	1200pF, ±3%

ANODE VOLTAGE MEASURING METHOD

CAUTION: Take extra precaution when measuring this high voltage. High voltages are also present in surrounding circuit boards (CRT DRIVE assembly, DEFLECTION assembly, and POWER SUPPLY assembly).

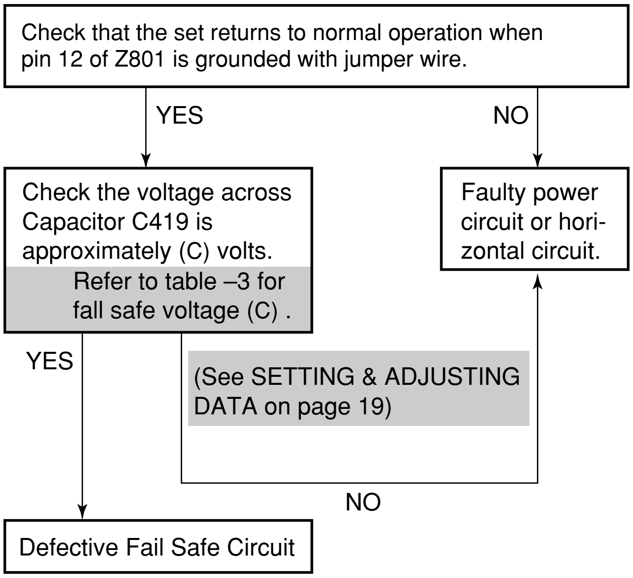
1. Disconnect the FBT anode cable as outlined below. Measure high voltage at the point where the cable enters the FBT.
2. Holding the rubber cover firmly, turn it counterclockwise and check that the lock has been disengaged. (See Fig. b on page 9.)
3. Determine the extent of the rubber cover before disconnecting the cable.
4. Pull straight up the anode cable to disconnect.
5. When reconnecting the cable, proceed in the reverse order. After reconnecting, tug on the cable to check that it is secure.

FS CIRCUIT CHECK

The Fail Safe (FS) circuit check is indispensable for the final check in servicing. Checking should be done following the steps below.

1. Turn the receiver on.
2. Temporarily short TP- (R) and TP- (X) on the DEF/POWER Board with a jumper wire.
   Raster and sound will disappear.
3. The receiver must remain in this state even after removing the jumper wire. This is the evidence that the FS circuit is functioning properly.
4. To obtain a picture again, temporarily turn the receiver off and allow the FS circuit more than 5 seconds to reset. Then turn the receiver on to produce a normal picture.

Troubleshooting Guide for Fail Safe Circuit


Check that the set returns to normal operation when pin 12 of Z801 is grounded with jumper wire.
YES
NO
Check the voltage across Capacitor C419 is approximately (C) volts.
Refer to table –3 for fall safe voltage (C) .
Faulty power circuit or horizontal circuit.
YES
(See SETTING & ADJUSTING DATA on page 19)
NO
Defective Fail Safe Circuit

CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA

【SAFETY INSTRUCTIONS】

		65"
HIGH VOLTAGE AT ZERO BEAM:	(A)	31.0 kV
MAX HIGH VOLTAGE:	(B)	32.5 kV

Table-1

【SERVICE MODE】

ADJUSTING ITEMS AND DATA IN THE SERVICE MODE:

Item	Name of adjustment	Preset	Data
RCUT	R CUTOFF	80H	←
GCUT	G CUTOFF	80H	←
BCUT	B CUTOFF	80H	←
RDRV	R DRIVE	40H	←
BDRV	B DRIVE	40H	←
BRTC	SUB-BRIGHT	80H	←
TNTC	SUB-TINT	48H	←
SCOL	SUB COLOR	0BH	←
SCNT	SUB-CONTRAST	15H	←
HPOS	HORIZ. POSITION	80H	←
VPOS	VERT. POSITION	01H	←
HIT	HEIGHT	31H	55H
LIN	V-LINEARITY	14H	←
VSC	V-S CORRECTION	10H	←
WID	PICTURE WIDTH	1FH	←

Item	Name of adjustment	Preset	Data
VPS	V-SHIFT	0AH	←
COLC	SUB COLOR CEN NTSC	52H	←
VCP	V-COMPENSATE	0AH	←
PARA	E-W PARABOLA (DPC)	17H	←
CNR	E-W CORNER	08H	←
HCP	H-COMPENSATE	00H	←
VFC	V-F CORRECT	00H	←
PHUE	PIP TINT	40H	←
PCNT	PIP CONT	18H	←
PCOL	PIP COLOR	1AH	←
VCEN	V POSITION	76H	←
TVOP	TV OPTION	58H	←
OPT1	TV SET OPTION	50H	←
OPT2	TV SET OPTION	8DH	←

Table-2

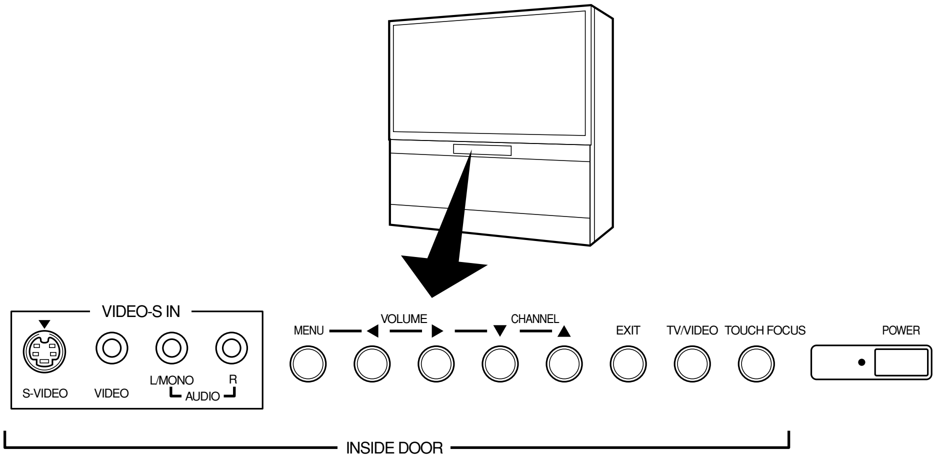
【CIRCUIT CHECKS】

HIGH VOLTAGE DET	(C)	8.7 V

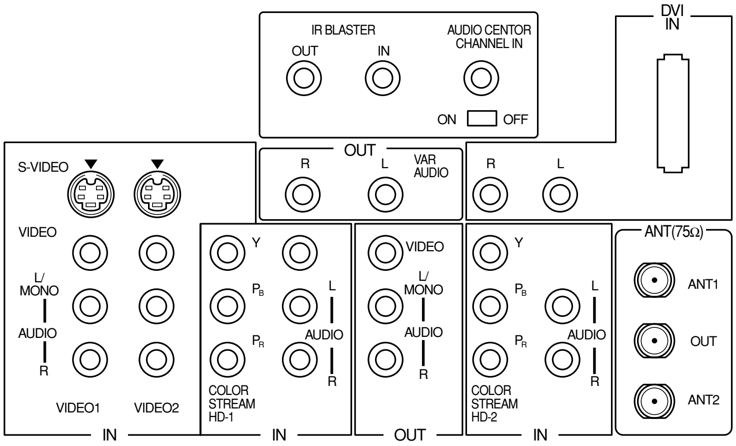
Table-3

LOCATION OF CONTROLS

TV front


VIDEO-S IN
S-VIDEO
VIDEO
L/MONO
R
AUDIO
MENU
VOLUME
CHANNEL
EXIT
TV/VIDEO
TOUCH FOCUS
POWER
INSIDE DOOR

TV rear


IR BLASTER
OUT
IN
AUDIO CENTOR CHANNEL IN
ON
OFF
DVI IN
S-VIDEO
VIDEO
L/ MONO
AUDIO
R
VIDEO1
VIDEO2
IN
OUT
R
L
VAR AUDIO
R
L
Y
P_B
P_R
L
AUDIO
R
COLOR STREAM HD-1
IN
VIDEO
L/ MONO
AUDIO
R
OUT
Y
P_B
P_R
L
AUDIO
R
COLOR STREAM HD-2
IN
ANT(75Ω)
ANT1
OUT
ANT2

Remote Control

Power turns the TV on or off

SLEEP sets the TV to turn at a specific time

LIGHT The initial press of the LIGHT button causes two actions:

Channel Numbers (0–9, 100) allow direct access to channels

MODE cycles through the 6 device modes

FAVOURITE allows access to Multi-Window function

PIC SIZE cycles through the three picure formats

MENU allows access to programming

ENTER sets programming menu information

▲▼◀ ▶ selects or adjusts programming menus

[FAV] ◀ ▶ selects your favourite channels

Volume ▲▼ adjusts the volume level

EXIT exits programming menus

Channel ▲▼ cycles through programmed channels

CH RTN returns to the last viewed channels

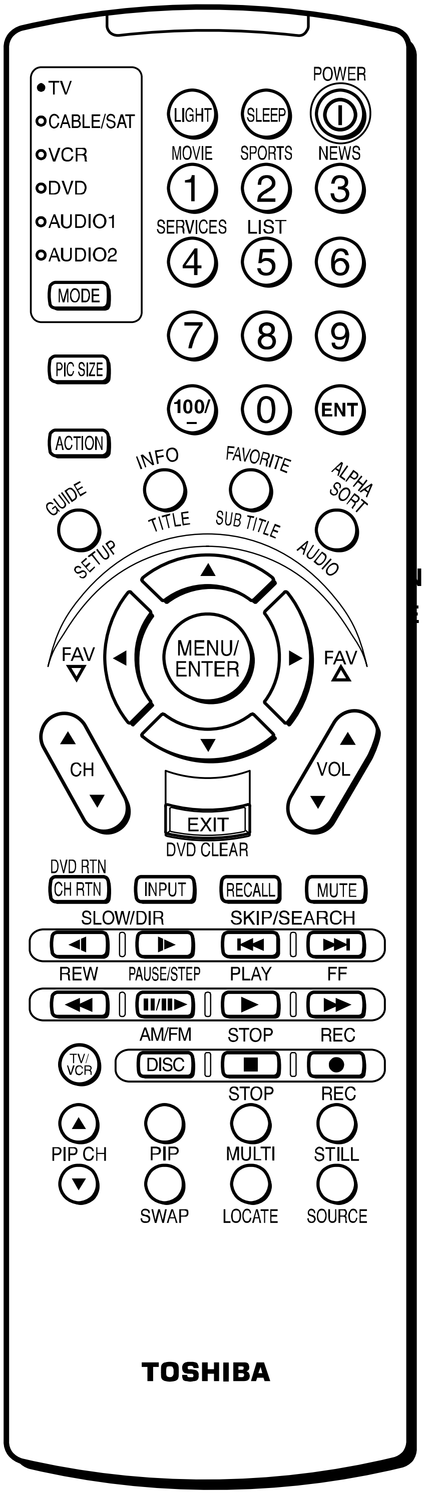
RECALL displays on-screen information

MUTE mutes the sound

INPUT selects video input source

PIP allows access to PIP functions

- **PIP** turns the PIP on or off
- **PIP CH ▲▼** selects the PIP channels
- **MULTI** allows access to Multi-Windows function
- **STILL** freezes the PIP
- **SOURCE** selects the PIP source
- **LOCATE** moves the PIP
- **SWAP** switches the PIP and main pictures



TV
CABLE/SAT
VCR
DVD
AUDIO1
AUDIO2
MODE
POWER
LIGHT
SLEEP
MOVIE
SPORTS
NEWS
1
2
3
SERVICES
LIST
4
5
6
7
8
9
PIC SIZE
100/–
0
ENT
ACTION
INFO
FAVORITE
ALPHA SORT
GUIDE
TITLE
SUB TITLE
SETUP
AUDIO
MENU/ ENTER
FAV ▽
FAV △
CH
VOL
EXIT
DVD CLEAR
DVD RTN
CH RTN
INPUT
RECALL
MUTE
SLOW/DIR
SKIP/SEARCH
REW
PAUSE/STEP
PLAY
FF
AM/FM
STOP
REC
TV/VCR
DISC
STOP
REC
PIP CH
PIP
MULTI
STILL
SWAP
LOCATE
SOURCE
TOSHIBA

PROGRAMMING CHANNEL MEMORY

The channel memory is the list of TV channel numbers the TV tunes in when you press the CHANNEL ▲ or ▼ button.
First, use the TV/CABLE and CH PROGRAM functions to preset all active channels in your area automatically.
If necessary, arrange the preset channels with the ADD/ERASE functions so that you can tune into only desired channels.
Note: If you utilize both ANT-1 and ANT-2 terminals for some model, perform programming channels for each input source.

TV/CABLE function

1 Press **MENU**, then press ▶ or ◀ until the SET UP menu appears.

2 Press ▼ (or ▲) until "TV/CABLE" is highlighted.

3 Press ▶ or ◀ to highlight either "TV" or "CABLE", whichever you use.

CH PROGRAM function

1 Select "CH PROGRAM" following steps 1 and 2 above.

2 Press ▶ or ◀ to start channel programming.
The TV will automatically cycle through all the TV or CABLE channels selected by the TV/CABLE function, and store active channels in the channel memory.

3 When channel programming is complete, you will see the message to the right appears.

4 Press **CHANNEL** ▲ or ▼ to make sure the channel programming has been done properly.

ADD/ERASE function

After performing the CH PROGRAM function, you can add or erase specific channels.

1 Select the channel you want to erase using the **CHANNEL** ▲ or ▼ button, or select the channel you want to add using the **Channel Number** buttons.

2 Press **MENU**, then press ▶ or ◀ until the SET UP menu appears.

3 Press ▼ (or ▲) until "ADD/ERASE" is highlighted.

4 Press ▶ or ◀ :
To erase the channel press the button until "ERASE" is highlighted.

To add the channel press the button until "ADD" is highlighted.

5 Repeat steps 1 to 4 for other channels.

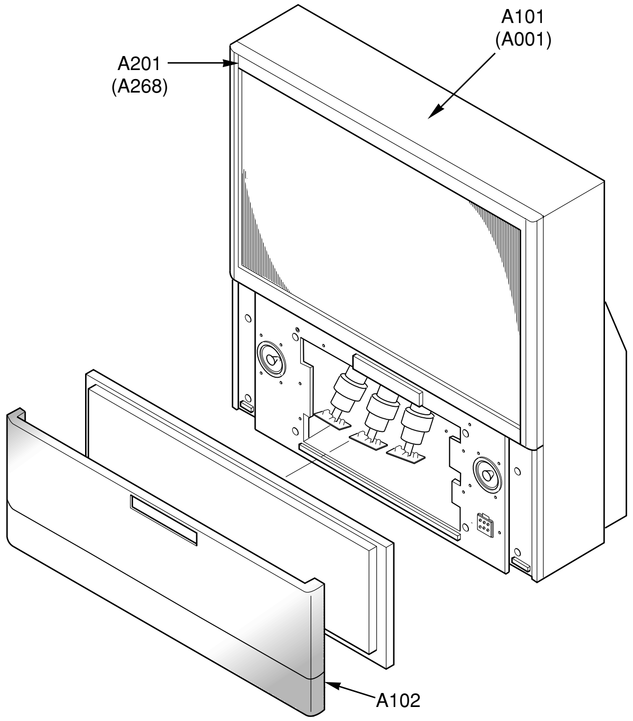
You have now completed the channel programming.

Note: The CHANNEL ▼/▲ buttons on the TV function as the ▼/▲ buttons while a menu is on the screen.

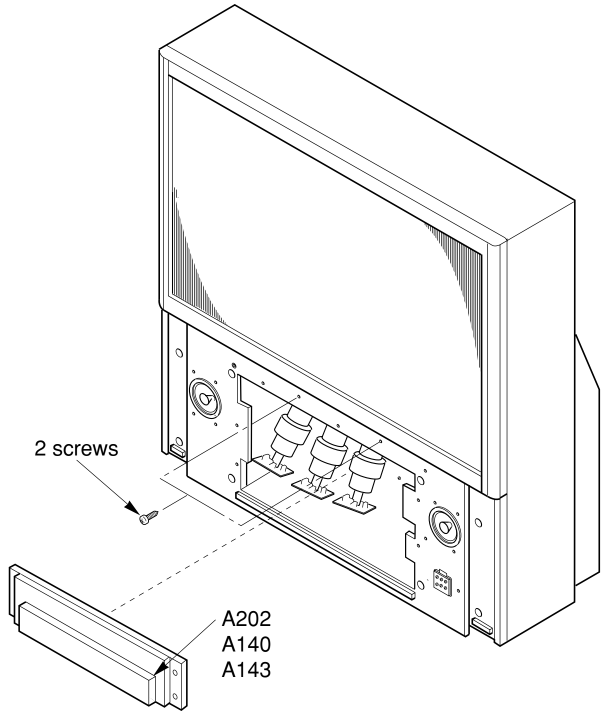
* Please refer to owner's manual in detail.

MECHANICAL DISASSEMBLY

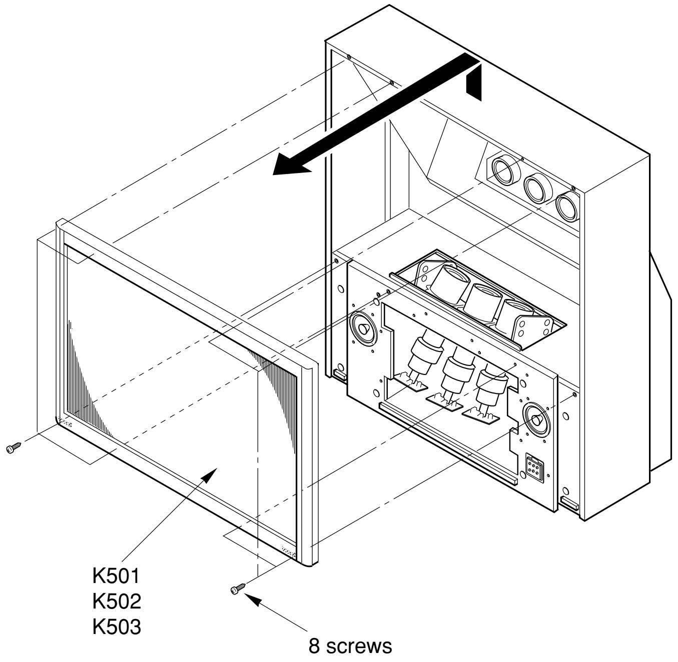
1 Speaker Grille Removal


A201
(A268)
A101
(A001)
A102

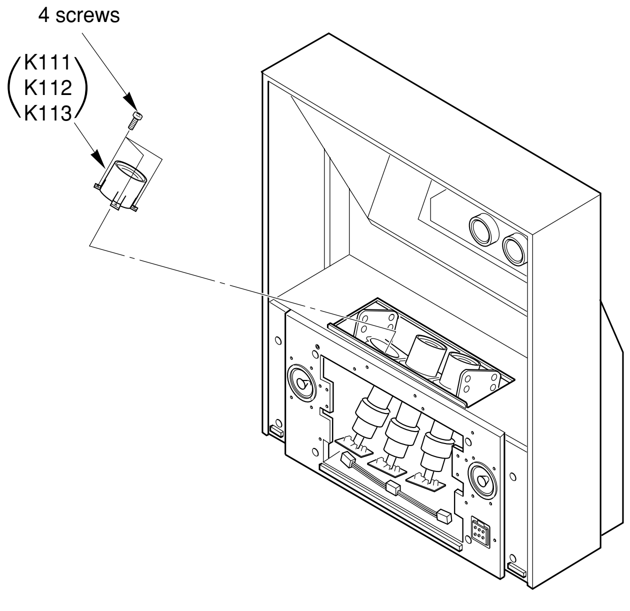
2 Control Panel Removal


2 screws
A202
A140
A143

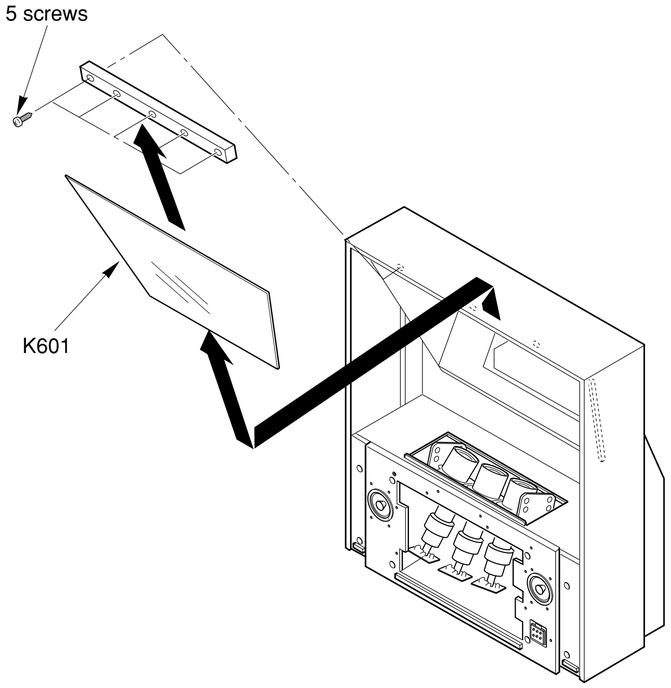
3 Front Mask Removal


K501
K502
K503
8 screws

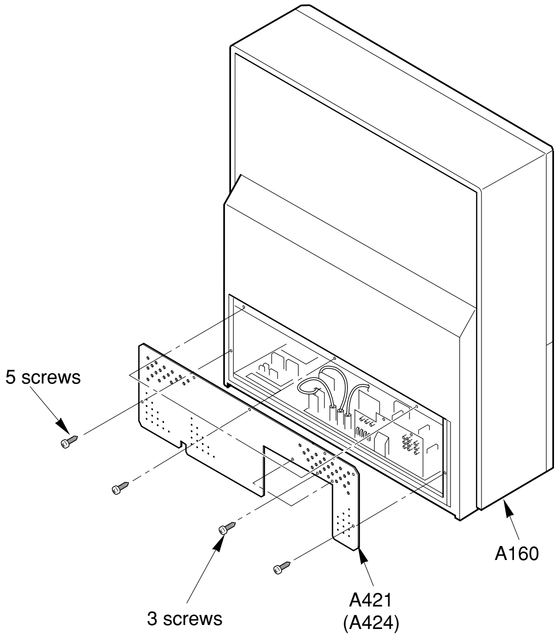
4 Shield Plate, Lens Removal


4 screws
K111
K112
K113

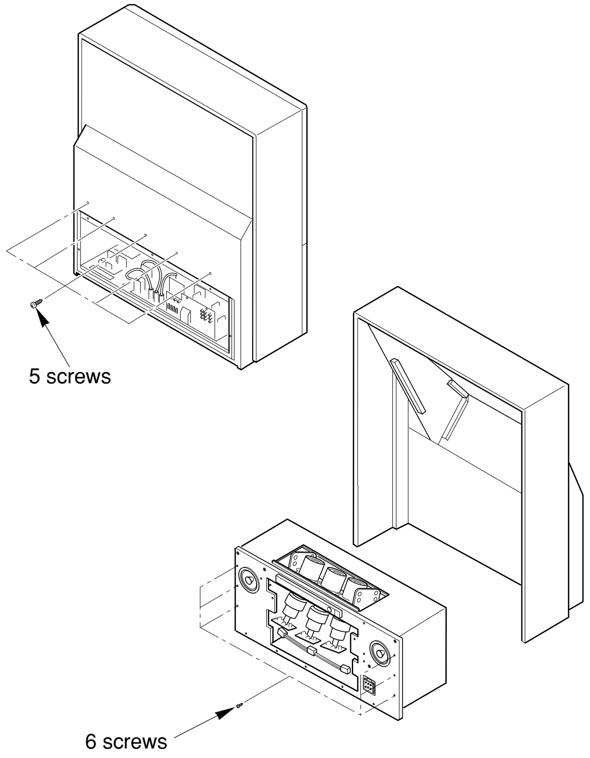
5 Mirror Removal


5 screws
K601

6 Back Board Removal


5 screws
3 screws
A421
(A424)
A160

7 Light Box Removal


5 screws
6 screws

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CHASSIS REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE “X-RAY RADIATION PRECAUTION”, “SAFETY PRECAUTION” AND “PRODUCT SAFETY NOTICE” ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols “⚠” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

NOTICE:

- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with ∗ mark is no longer available after the end of the production.*

Models : 65HDX82

Capacitors .... CD : Ceramic Disk PF : Plastic Film EL : Electrolytic
Resistors .... CF : Carbon Film CC : Carbon Composition MF : Metal Film
OMF : Oxide Metal Film VR : Variable Resistor FR : Fusible Resistor
(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Location No.	Parts No.	Description
CAPACITORS		
C102	24665221	ELECTROLYTIC, 10V 220UF M 3A
C105	24100102	CERAMIC CHIP, 50V F 1000PF Z
C106	24669479	ELECTROLYTIC, 50V 4.7UF M 3A
C107	24666221	ELECTROLYTIC, 16V 220UF M 3A
C112	24665221	ELECTROLYTIC, 10V 220UF M 3A
C115	24100102	CERAMIC CHIP, 50V F 1000PF Z
C117	24666221	ELECTROLYTIC, 16V 220UF M 3A
C201	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C202	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C203	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C204	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C205	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C205	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
C206	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C207	24105100	CERAMIC CHIP, 50V CH 10PF D
C207	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C208	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C208	24105100	CERAMIC CHIP, 50V CH 10PF D
C209	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C209	24105100	CERAMIC CHIP, 50V CH 10PF D
C210	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C211	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C212	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C212	24666100	ELECTROLYTIC, 10V 10UF M 3A
C213	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C214	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C215	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C216	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C217	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C218	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C219	24109103	CERAMIC CHIP, 50V B 0.01UF K
C220	24206479	ELECTROLYTIC, 50V 4.7UF M 7L 3A
C220	24503041	PLASTIC FILM , 63V 0.1UF J
C221	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C221	24503041	PLASTIC FILM , 63V 0.1UF J
C222	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C223	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C224	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C225	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C226	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C227	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C228	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C229	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C230	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C231	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C232	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C233	24109103	CERAMIC CHIP, 50V B 0.01UF K
C236	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C237	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C238	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C239	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C240	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C241	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C242	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C243	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C244	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C245	24105560	CERAMIC CHIP, 50V CH 56PF J
C246	24105150	CERAMIC CHIP, 50V CH 15PF J
C247	24105270	CERAMIC CHIP, 50V CH 27PF J
C248	24105101	CERAMIC CHIP, 50V CH 100PF J
C249	24105820	CERAMIC CHIP, 50V CH 82PF J
C250	24105560	CERAMIC CHIP, 50V CH 56PF J
C251	24105150	CERAMIC CHIP, 50V CH 15PF J
C252	24105270	CERAMIC CHIP, 50V CH 27PF J
C253	24105101	CERAMIC CHIP, 50V CH 100PF J
C254	24105820	CERAMIC CHIP, 50V CH 82PF J
C255	24105560	CERAMIC CHIP, 50V CH 56PF J
C256	24105150	CERAMIC CHIP, 50V CH 15PF J
C257	24105270	CERAMIC CHIP, 50V CH 27PF J
C258	24105101	CERAMIC CHIP, 50V CH 100PF J
C259	24105820	CERAMIC CHIP, 50V CH 82PF J
C260	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C261	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C262	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C263	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C264	24105100	CERAMIC CHIP, 50V CH 10PF D
C265	24105100	CERAMIC CHIP, 50V CH 10PF D

Location No.	Parts No.	Description
C266	24105100	CERAMIC CHIP, 50V CH 10PF D
C267	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C268	24105101	CERAMIC CHIP, 50V CH 100PF J
C269	24105101	CERAMIC CHIP, 50V CH 100PF J
C272	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C273	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C301	24617820	ELECTROLYTIC, 50V 100UF M 11L 3D
C302	24669101	ELECTROLYTIC, 50V 100UF M 3A
C303	24109473	CERAMIC CHIP, 25V B 0.047UF K
C304	24503053	PLASTIC FILM, 63V 1UF J
C305	24082057	PLASTIC FILM, 100V 220000PF J
C306	24082260	PLASTIC FILM, 100V 4700PF J
C307	24109333	CERAMIC CHIP CK73B 25V 33000PFK
C308	24617820	ELECTROLYTIC, 50V 100UF M 11L 3D
C309	24693473	PLASTIC FILM, 100V 0.047UF J
C311	24109471	CERAMIC CHIP, 50V B 470PF K
C312	24666100	ELECTROLYTIC, 10V 10UF M 3A
C313	24666220	ELECTROLYTIC, 16V 22UF M 3A
C321	24503041	PLASTIC FILM , 63V 0.1UF J
C322	24503045	PLASTIC FILM, 63V 0.22UF J
C323	24503045	PLASTIC FILM, 63V 0.22UF J
C324	24073053	ELECTROLYTIC, 25V 100UF M 3A
C325	24503041	PLASTIC FILM , 63V 0.1UF J
C326	24503041	PLASTIC FILM , 63V 0.1UF J
C327	24567103	PLASTIC FILM, 50V 0.01UF J
C328	24617912	ELECTROLYTIC, 50V 2.2UF K 3A LI
C329	24567183	PLASTIC FILM, 50V 18000PF J
C331	24212102	CERAMIC DISC, 50V B 1000PF K
C332	24073020	ELECTROLYTIC, 10V 1000UF M 3A
C333	24567103	PLASTIC FILM, 50V 0.01UF J
C334	24591102	PLASTIC FILM, 50V 1000PF J
C335	24503049	PLASTIC FILM, 63V 0.47UF J
C336	24503041	PLASTIC FILM , 63V 0.1UF J
C337	24212101	CERAMIC DISC, 50V B 100PF K
C338	24073020	ELECTROLYTIC, 10V 1000UF M 3A
C339	24666101	ELECTROLYTIC, 16V 100UF M 3A
C341	24591222	PLASTIC FILM, 50V 2200PF J
C342	24591222	PLASTIC FILM, 50V 2200PF J
C343	24667101	ELECTROLYTIC, 25V 100UF M 3A
C344	24567393	PLASTIC FILM, 50V 39000PF J
C345	24503041	PLASTIC FILM , 63V 0.1UF J
C346	24669100	ELECTROLYTIC, 50V 10UF M 3A
C347	24085946	ELECTROLYTIC, NONPOLAR, 16V 10UF M 3A
C348	24503045	PLASTIC FILM, 63V 0.22UF J
C349	24503045	PLASTIC FILM, 63V 0.22UF J
C351	24503041	PLASTIC FILM , 63V 0.1UF J
C352	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C353	24669010	ELECTROLYTIC, 50V 1.0UF M 3A
C354	24567823	PLASTIC FILM, 50V 82000PF J
C355	24567563	PLASTIC FILM, 50V 56000PF J
C356	24665220	ELECTROLYTIC CE04Q 10V 22UF M 3A
C357	24073037	ELECTROLYTIC, 16V 47UF M 3A
C401	24214332	CERAMIC DISC, 500V B 3300PF K
C402	24214391	CERAMIC DISC, 500V B 390PF K
C403	24676220	ELECTROLYTIC, 100V 22UF M 3A
C405	24567124	PLASTIC FILM, 50V 0.12UF J
⚠ C407	24503099	MT PLA CAP T 1800VH 472H
⚠ C408	24820822	PLASTIC FILM, 630V 8200PF J
C410	24503149	PLASTIC FILM, 250V 3.3UF
C411	24678220	ELECTROLYTIC, 200V 22UF M
C412	24828104	PLASTIC FILM CQ92 T 200V R1UF J
C413	24214221	CERAMIC DISC, 500V B 220PF K
⚠ C414	24503142	MT PLA CAP T 400V 274J
C415	24092484	CERAMIC DISC, 2KV B 1500PF K
C416	24503334	MT PLA CAP T 250V 155J

Location No.	Parts No.	Description
⚠ C417	24503252	MT PLA CAP T 400V 304J
C418	24073120	250V 33UF TOKU
C420	24503041	PLASTIC FILM , 63V 0.1UF J
C421	24073118	ELECTROLYTIC, 160V 33UF M
C422	24591102	PLASTIC FILM, 50V 1000PF J
C423	24211222	CERAMIC DISC, 2KV B 2200PFK
C424	24828473	PLASTIC FILM, 200V 47000PF J
C426	24591153	PLASTIC FILM, 50V 0.015MF J
C427	24567123	PLASTIC FILM, 50V 12000PF J
C428	24591102	PLASTIC FILM, 50V 1000PF J
C429	24567333	PLASTIC FILM, 50V 33000PF J
C431	24591102	PLASTIC FILM, 50V 1000PF J
⚠ C432	24820822	PLASTIC FILM, 630V 8200PF J
⚠ C433	24503061	MT PLA CAP T 1800VH 122H
C434	24073057	ELECTROLYTIC, 25V 1000UF M 3A
C435	24503041	PLASTIC FILM , 63V 0.1UF J
C436	24503041	PLASTIC FILM , 63V 0.1UF J
C437	24666331	ELECTROLYTIC, 16V 330UF M 3A
C438	24666101	ELECTROLYTIC, 16V 100UF M 3A
C439	24591223	PLASTIC FILM, 50V 0.022MF J
⚠ C441	24503099	MT PLA CAP T 1800VH 472H
C451	24567223	PLASTIC FILM, 50V 22000PF J
C452	24073038	ELECTROLYTIC, 16V 100UF M 3A
C453	24109223	CERAMIC CHIP, 25V B 0.022UF K
C454	24797010	ELECTROLYTIC, 50V 1UF M
C455	24109103	CERAMIC CHIP, 50V B 0.01UF K
C456	24085903	ELEC. NONPOLAR, 50V 1.0UF M NP 3A
C457	24669010	ELECTROLYTIC, 50V 1.0UF M 3A
C458	24073038	ELECTROLYTIC, 16V 100UF M 3A
C459	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C462	24105101	CERAMIC CHIP, 50V CH 100PF J
C463	24109103	CERAMIC CHIP, 50V B 0.01UF K
C464	24109103	CERAMIC CHIP, 50V B 0.01UF K
C465	24109103	CERAMIC CHIP, 50V B 0.01UF K
C467	24085903	ELEC. NONPOLAR, 50V 1.0UF M NP 3A
C471	24503041	PLASTIC FILM , 63V 0.1UF J
C472	24436100	CERAMIC DISC, 50V SL 10PF C
C473	24503041	PLASTIC FILM , 63V 0.1UF J
C474	24501561	PLASTIC FILM, 50V 560PF J
C475	24501272	PLASTIC FILM, 50V 27OO PF J
C476	24669479	ELECTROLYTIC, 50V 4.7UF M 3A
C477	24567103	PLASTIC FILM, 50V 0.01UF J
C478	24591822	PLASTIC FILM, 50V 8200PF J
C479	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C481	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C482	24501272	PLASTIC FILM, 50V 27OO PF J
C483	24501102	PLASTIC FILM, 50V 1000PF J
C484	24503041	PLASTIC FILM , 63V 0.1UF J
C485	24666331	ELECTROLYTIC, 16V 330UF M 3A
C486	24567103	PLASTIC FILM, 50V 0.01UF J
C487	24501151	50V 151J
C488	24503041	PLASTIC FILM , 63V 0.1UF J
C489	24666331	ELECTROLYTIC, 16V 330UF M 3A
C491	24591332	PLASTIC FILM, 50V 3300PF J
C493	24436220	CERAMIC DISC, 50V SL 22PF J
C496	24503049	PLASTIC FILM, 63V 0.47UF J
C497	24073039	ELECTROLYTIC CE04P 16V 220UF M 3A
C498	24073084	ELECTROLYTIC, 50V 4.7UF M 3A
C499	24073035	ELECTROLYTIC CE04P 16V 22UF M 3A
C510	24666101	ELECTROLYTIC, 16V 100UF M 3A
C511	24109103	CERAMIC CHIP, 50V B 0.01UF K
C513	24109103	CERAMIC CHIP, 50V B 0.01UF K
C515	24666221	ELECTROLYTIC, 16V 220UF M 3A
C518	24666100	ELECTROLYTIC, 10V 10UF M 3A
C529	24109103	CERAMIC CHIP, 50V B 0.01UF K

Location No.	Parts No.	Description
C530	24669010	ELECTROLYTIC, 50V 1.0UF M 3A
C531	24666101	ELECTROLYTIC, 16V 100UF M 3A
C532	24666100	ELECTROLYTIC, 10V 10UF M 3A
C536	24109103	CERAMIC CHIP, 50V B 0.01UF K
C537	24109103	CERAMIC CHIP, 50V B 0.01UF K
C547	24109103	CERAMIC CHIP, 50V B 0.01UF K
C551	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C552	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C553	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C554	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C555	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C556	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C563	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
C564	24666100	ELECTROLYTIC, 10V 10UF M 3A
C565	24206478	ELECTROLYTIC, 50V 0.47UF M 7L 3A
C566	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
C567	24206478	ELECTROLYTIC, 50V 0.47UF M 7L 3A
C568	24109103	CERAMIC CHIP, 50V B 0.01UF K
C570	24669010	ELECTROLYTIC, 50V 1.0UF M 3A
C601	24109102	CERAMIC CHIP, 50V B 1000PF K
C602	24109102	CERAMIC CHIP, 50V B 1000PF K
C603	24669100	ELECTROLYTIC, 50V 10UF M 3A
C604	24669100	ELECTROLYTIC, 50V 10UF M 3A
C605	24667470	ELECTROLYTIC, 25V 47UF M 3A
C606	24667470	ELECTROLYTIC, 25V 47UF M 3A
C607	24503041	PLASTIC FILM , 63V 0.1UF J
C608	24503041	PLASTIC FILM , 63V 0.1UF J
C609	24669102	ELECTROLYTIC, 50V 1000UF M 3A
C610	24669102	ELECTROLYTIC, 50V 1000UF M 3A
C611	24667470	ELECTROLYTIC, 25V 47UF M 3A
C612	24794221	ELECTROIYTIC, 16V 220UF M
C661	24797010	ELECTROLYTIC, 50V 1UF M
C662	24797010	ELECTROLYTIC, 50V 1UF M
C663	24797010	ELECTROLYTIC, 50V 1UF M
C664	24797100	ELECTROLYTIC, 50V 10UF M
C665	24109103	CERAMIC CHIP, 50V B 0.01UF K
C666	24797010	ELECTROLYTIC, 50V 1UF M
C667	24794100	ELECTROLYTIC, 16V 10UF M
C680	24669471	ELECTROLYTIC, 50V 470UF M 3A
C681	24666100	ELECTROLYTIC, 10V 10UF M 3A
C682	24092538	CERAMIC CHIP, 10V F 1UF Z
C683	24092538	CERAMIC CHIP, 10V F 1UF Z
C690	24109103	CERAMIC CHIP, 50V B 0.01UF K
C704	24232103	CERAMIC DISC, 50V F 10000PF Z
C705	24206479	ELECTROLYTIC, 50V 4.7UF M 7L 3A
C707	24797470	ELECTROLYTIC, 50V 47UF M
C712	24797470	ELECTROLYTIC, 50V 47UF M
C713	24790470	ELECTROLYTIC, 160V 47UF M
C715	24214472	CERAMIC DISC, 500C B 4700PF K
C717	24214472	CERAMIC DISC, 500C B 4700PF K
C718	24666470	ELECTORLYTIC, 16V 47UF M 3A
C719	24435560	CERAMIC DISC, 500V SL 56PF J
C720	24790220	ELECTROLYTIC, 160V 22UF M
C721	24666470	ELECTORLYTIC, 16V 47UF M 3A
C726	24212102	CERAMIC DISC, 50V B 1000PF K
C760	24797470	ELECTROLYTIC, 50V 47UF M
C761	24212102	CERAMIC DISC, 50V B 1000PF K
C762	24797470	ELECTROLYTIC, 50V 47UF M
C765	24214472	CERAMIC DISC, 500C B 4700PF K
C766	24214472	CERAMIC DISC, 500C B 4700PF K
C767	24790470	ELECTROLYTIC, 160V 47UF M
C768	24666470	ELECTORLYTIC, 16V 47UF M 3A
C769	24666470	ELECTORLYTIC, 16V 47UF M 3A
C770	24435560	CERAMIC DISC, 500V SL 56PF J
C771	24790220	ELECTROLYTIC, 160V 22UF M

Location No.	Parts No.	Description
C780	24797470	ELECTROLYTIC, 50V 47UF M
C781	24212102	CERAMIC DISC, 50V B 1000PF K
C782	24797470	ELECTROLYTIC, 50V 47UF M
C784	24214472	CERAMIC DISC, 500C B 4700PF K
C786	24214472	CERAMIC DISC, 500C B 4700PF K
C787	24790470	ELECTROLYTIC, 160V 47UF M
C788	24666470	ELECTORLYTIC, 16V 47UF M 3A
C789	24666470	ELECTORLYTIC, 16V 47UF M 3A
C790	24435560	CERAMIC DISC, 500V SL 56PF J
C791	24790220	ELECTROLYTIC, 160V 22UF M
C792	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C801	24203101	ELECTROLYTIC, 16V 100UF M 7L 3A
C801	24503002	PLASTIC FILM, AC275V 0.22UF M
C802	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C803	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C804	24617033	CHEMICON 04CP 25V 4R7M
C805	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C806	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C810	24073119	200V1000U105C
C811	24092597	CERAMIC DISC CK45E AC250V 4700PF M
C812	24092597	CERAMIC DISC CK45E AC250V 4700PF M
C813	24092597	CERAMIC DISC CK45E AC250V 4700PF M
C814	24092593	CERAMIC DISC, AC250V E 1000PF M
C815	24092593	CERAMIC DISC, AC250V E 1000PF M
C820	24763101	ELECTROLYTIC, 16V 100UF M
C821	24092730	CERAMIC CHIP, 16V B 0.1UF K
C822	24763101	ELECTROLYTIC, 16V 100UF M
C823	24109103	CERAMIC CHIP, 50V B 0.01UF K
C824	24092730	CERAMIC CHIP, 16V B 0.1UF K
C825	24109103	CERAMIC CHIP, 50V B 0.01UF K
C826	24763101	ELECTROLYTIC, 16V 100UF M
C827	24092730	CERAMIC CHIP, 16V B 0.1UF K
C830	24073037	ELECTROLYTIC, 16V 47UF M 3A
C831	24503047	PLASTIC FILM, 63V 0.33UF J
C832	24073038	ELECTROLYTIC, 16V 100UF M 3A
C833	24073037	ELECTROLYTIC, 16V 47UF M 3A
C834	24503047	PLASTIC FILM, 63V 0.33UF J
C835	24073016	ELECTROLYTIC CE04P 10V 100UF M 3A
C836	24073037	ELECTROLYTIC, 16V 47UF M 3A
C837	24503047	PLASTIC FILM, 63V 0.33UF J
C838	24073016	ELECTROLYTIC CE04P 10V 100UF M 3A
C840	24679220	ELECTROLYTIC, 250V 22UF M 3A
C841	24073043	ELECTROLYTIC, 16V 2200UF M 3A
C842	24503041	PLASTIC FILM , 63V 0.1UF J
C843	24092469	CERAMIC DISC, 2KV B 100PF K
C845	24073082	CHEMICON 04P 50V 2R2M
C851	24073073	ELECTROLYTIC, 35V 2200UF M 3A
C852	24073094	ELECTROLYTIC, 50V 1000UF M 3A
C853	24073057	ELECTROLYTIC, 25V 1000UF M 3A
C854	24073092	ELECTROLYTIC, 50V 330UF M 3A
C857	24073060	ELECTROLYTIC, 25V 4700UF M 3A
C858	24073060	ELECTROLYTIC, 25V 4700UF M 3A
C860	24214103	CERAMIC DISC, 500V B 10000PF K
C862	24092474	CERAMIC DISC, 2KV B 220PF K
C863	24503041	PLASTIC FILM , 63V 0.1UF J
C864	24092347	CERAMIC DISC, 2KV R 1500PF K
C865	24092347	CERAMIC DISC, 2KV R 1500PF K
C866	24503053	PLASTIC FILM, 63V 1UF J
C867	24591682	PLASTIC FILM, 50V 6800PF J
C868	24073067	ELECTROLYTIC CE04P 35V 47UF M 3A
C869	24678229	ELECTROLYTIC, 200V 2.2UF M 3A
C870	24503171	PLASTIC CAP T 630V 124J
C871	24092347	CERAMIC DISC, 2KV R 1500PF K
C873	24503045	PLASTIC FILM, 63V 0.22UF J
C874	24092474	CERAMIC DISC, 2KV B 220PF K

Location No.	Parts No.	Description
C876	24503041	PLASTIC FILM , 63V 0.1UF J
C877	24092347	CERAMIC DISC, 2KV R 1500PF K
C878	24503171	PLASTIC CAP T 630V 124J
C879	24212101	CERAMIC DISC, 50V B 100PF K
C882	24678478	ELECTROLYTIC, 200V 0.47UF M 3A
C884	24086916	ELECTROLYTIC CE692R 160V 330UF M 3D
C890	24073095	ELECTROLYTIC, 50V 2200UF M 3A
C891	24828333	PLASTIC FILM, 200V 33000PF J
C894	24073059	ELECTROLYTIC, 25V 3300UF M 3A
C895	24073044	ELECTROLYTIC, 16V 3300UF M 3A
C898	24092398	CERAMIC DISC, 25V 0.1UF Z, 24092398A NI TOOITSU
C901	24211102	CERAMIC DISC, 2KV B 1000PF K
C902	24794101	ELECTROLYTIC, 16V 100UF M
C903	24232103	CERAMIC DISC, 50V F 10000PF Z
C904	24436221	CERAMIC DISC, 50V SL 220PF J
C906	24679220	ELECTROLYTIC, 250V 22UF M 3A
C907	24214101	CERAMIC DISC, 500V B 100PF K
C911	24211102	CERAMIC DISC, 2KV B 1000PF K
C912	24794101	ELECTROLYTIC, 16V 100UF M
C913	24232103	CERAMIC DISC, 50V F 10000PF Z
C914	24436221	CERAMIC DISC, 50V SL 220PF J
C915	24679220	ELECTROLYTIC, 250V 22UF M 3A
C917	24214101	CERAMIC DISC, 500V B 100PF K
C921	24211102	CERAMIC DISC, 2KV B 1000PF K
C922	24794101	ELECTROLYTIC, 16V 100UF M
C923	24436221	CERAMIC DISC, 50V SL 220PF J
C924	24232103	CERAMIC DISC, 50V F 10000PF Z
C925	24679220	ELECTROLYTIC, 250V 22UF M 3A
C926	24214101	CERAMIC DISC, 500V B 100PF K
C930	24214103	CERAMIC DISC, 500V B 10000PF K
C935	24214103	CERAMIC DISC, 500V B 10000PF K
C936	24214103	CERAMIC DISC, 500V B 10000PF K
C961	24763102	ELECTROLYTIC, 16V 1000UF M
C962	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C967	24436471	CERAMIC DISC, 50V SL 470PF J
C7703	24503037	MT PLA CAP 63V 0.047UF J
C7704	24667101	ELECTROLYTIC, 25V 100UF M 3A
C7706	24503047	PLASTIC FILM, 63V 0.33UF J
C7708	24105150	CERAMIC CHIP, 50V CH 15PF J
C7709	24105150	CERAMIC CHIP, 50V CH 15PF J
C7710	24105150	CERAMIC CHIP, 50V CH 15PF J
C7711	24105150	CERAMIC CHIP, 50V CH 15PF J
C7712	24105150	CERAMIC CHIP, 50V CH 15PF J
C7713	24105150	CERAMIC CHIP, 50V CH 15PF J
C7714	24105150	CERAMIC CHIP, 50V CH 15PF J
C7715	24105150	CERAMIC CHIP, 50V CH 15PF J
C7716	24105150	CERAMIC CHIP, 50V CH 15PF J
C7717	24105150	CERAMIC CHIP, 50V CH 15PF J
C7718	24105150	CERAMIC CHIP, 50V CH 15PF J
C7719	24105150	CERAMIC CHIP, 50V CH 15PF J
C7721	24105102	CERAMIC CHIP, 25V CH 1000PF J
C7722	24105331	CERAMIC CHIP, 50V CH 330PF J
C7724	24669101	ELECTROLYTIC, 50V 100UF M 3A
C7725	24669101	ELECTROLYTIC, 50V 100UF M 3A
C7726	24105101	CERAMIC CHIP, 50V CH 100PF J
C7727	24105331	CERAMIC CHIP, 50V CH 330PF J
C7729	24105102	CERAMIC CHIP, 25V CH 1000PF J
C7730	24105331	CERAMIC CHIP, 50V CH 330PF J
C7732	24105331	CERAMIC CHIP, 50V CH 330PF J
C7733	24105331	CERAMIC CHIP, 50V CH 330PF J
C7735	24669101	ELECTROLYTIC, 50V 100UF M 3A
C7736	24669101	ELECTROLYTIC, 50V 100UF M 3A
C7737	24105102	CERAMIC CHIP, 25V CH 1000PF J
C7738	24105331	CERAMIC CHIP, 50V CH 330PF J

Location No.	Parts No.	Description
C7740	24105331	CERAMIC CHIP, 50V CH 330PF J
C7741	24105331	CERAMIC CHIP, 50V CH 330PF J
C7751	24667101	ELECTROLYTIC, 25V 100UF M 3A
C7753	24567334	PLASTIC FILM, 50V 0.33UF J
C7766	24667221	ELECTROLYTIC, 25V 220UF M 3A
C7767	24667101	ELECTROLYTIC, 25V 100UF M 3A
C7768	24667101	ELECTROLYTIC, 25V 100UF M 3A
C7769	24109103	CERAMIC CHIP, 50V B 0.01UF K
C7770	24667101	ELECTROLYTIC, 25V 100UF M 3A
C7772	24567334	PLASTIC FILM, 50V 0.33UF J
C7774	24105331	CERAMIC CHIP, 50V CH 330PF J
C7779	24105331	CERAMIC CHIP, 50V CH 330PF J
C7780	24105471	CERAMIC CHIP, 50V CH 470PF J
C7783	24105471	CERAMIC CHIP, 50V CH 470PF J
C7791	24667471	ELECTROLYTIC, 25V 470UF M 3A
C7792	24109472	CERAMIC CHIP, 50V B 4700PF K
C7793	24503041	PLASTIC FILM , 63V 0.1UF J
C7794	24503041	PLASTIC FILM , 63V 0.1UF J
C7795	24109223	CERAMIC CHIP, 25V B 0.022UF K
C7796	24669221	ELECTROLYTIC, 50V 220UF M 3A
C7797	24667471	ELECTROLYTIC, 25V 470UF M 3A
C7798	24669221	ELECTROLYTIC, 50V 220UF M 3A
C7810	24092511	CHIP CERA CAP 50V CH 471B
C7811	24105471	CERAMIC CHIP, 50V CH 470PF J
C7812	24109103	CERAMIC CHIP, 50V B 0.01UF K
C7813	24666220	ELECTROLYTIC, 16V 22UF M 3A
C7814	24666220	ELECTROLYTIC, 16V 22UF M 3A
C7815	24591223	PLASTIC FILM, 50V 0.022MF J
C7817	24109332	CERAMIC CHIP, 50V B 3300PF K
C7818	24109102	CERAMIC CHIP, 50V B 1000PF K
C7819	24109102	CERAMIC CHIP, 50V B 1000PF K
C7820	24109332	CERAMIC CHIP, 50V B 3300PF K
C7822	24503053	PLASTIC FILM, 63V 1UF J
C9100	24436471	CERAMIC DISC, 50V SL 470PF J
C9200	24436471	CERAMIC DISC, 50V SL 470PF J
CA04	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA05	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA06	24109392	CERAMIC CHIP, 50V B 3900PF K
CA07	24109392	CERAMIC CHIP, 50V B 3900PF K
CA08	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA09	24011683	CHIP, METAL FILM, 1/20W 68K OHM J
CA14	24666100	ELECTROLYTIC, 10V 10UF M 3A
CA18	24666100	ELECTROLYTIC, 10V 10UF M 3A
CA23	24105101	CERAMIC CHIP, 50V CH 100PF J
CA25	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA27	24092538	CERAMIC CHIP, 10V F 1UF Z
CA28	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CA30	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CA31	24092538	CERAMIC CHIP, 10V F 1UF Z
CA33	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA34	24092538	CERAMIC CHIP, 10V F 1UF Z
CA37	24105101	CERAMIC CHIP, 50V CH 100PF J
CA38	24105101	CERAMIC CHIP, 50V CH 100PF J
CA39	24105101	CERAMIC CHIP, 50V CH 100PF J
CA42	24109392	CERAMIC CHIP, 50V B 3900PF K
CA45	24105471	CERAMIC CHIP, 50V CH 470PF J
CA46	24105101	CERAMIC CHIP, 50V CH 100PF J
CA49	24105101	CERAMIC CHIP, 50V CH 100PF J
CA54	24092730	CERAMIC CHIP, 16V B 0.1UF K
CA59	24105101	CERAMIC CHIP, 50V CH 100PF J
CA60	24105101	CERAMIC CHIP, 50V CH 100PF J
CA61	24666220	ELECTROLYTIC, 16V 22UF M 3A
CA68	24666100	ELECTROLYTIC, 10V 10UF M 3A
CA69	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA71	24105331	CERAMIC CHIP, 50V CH 330PF J

Location No.	Parts No.	Description
CA72	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CA73	24666100	ELECTROLYTIC, 10V 10UF M 3A
CA80	24503041	PLASTIC FILM , 63V 0.1UF J
CA81	24073015	ELECTROLYTIC, 10V 47UF M 3A
CA82	24503049	PLASTIC FILM, 63V 0.47UF J
CA251	24073015	ELECTROLYTIC, 10V 47UF M 3A
CA331	24073015	ELECTROLYTIC, 10V 47UF M 3A
CA611	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA701	24092538	CERAMIC CHIP, 10V F 1UF Z
CA705	24666100	ELECTROLYTIC, 10V 10UF M 3A
CB01	24794470	ELECTORLYTIC, 16V 47UF M
CB05	24666100	ELECTROLYTIC, 10V 10UF M 3A
CB13	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CB14	24105331	CERAMIC CHIP, 50V CH 330PF J
CB15	24794100	ELECTROLYTIC, 16V 10UF M
CB51	24590103	PLASTIC FILM, 50V 0.01MF J
CB52	24794470	ELECTORLYTIC, 16V 47UF M
CB53	24503041	PLASTIC FILM , 63V 0.1UF J
CB54	24436221	CERAMIC DISC, 50V SL 220PF J
CB55	24797010	ELECTROLYTIC, 50V 1UF M
CB56	24794470	ELECTORLYTIC, 16V 47UF M
CB57	24503041	PLASTIC FILM , 63V 0.1UF J
CB58	24794470	ELECTORLYTIC, 16V 47UF M
CB59	24590103	PLASTIC FILM, 50V 0.01MF J
CB60	24794100	ELECTROLYTIC, 16V 10UF M
CB61	24503041	PLASTIC FILM , 63V 0.1UF J
CB62	24105331	CERAMIC CHIP, 50V CH 330PF J
CB90	24109103	CERAMIC CHIP, 50V B 0.01UF K
CB91	24666100	ELECTROLYTIC, 10V 10UF M 3A
CC01	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CC02	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CC03	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CC04	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CD01	24797479	ELECTROLYTIC, 50V 4.7UF M
CD02	24797479	ELECTROLYTIC, 50V 4.7UF M
CD03	24503041	PLASTIC FILM , 63V 0.1UF J
CD04	24503041	PLASTIC FILM , 63V 0.1UF J
CD05	24590102	PLASTIC FILM, 50V 1000PF J
CD06	24503045	PLASTIC FILM, 63V 0.22UF J
CD07	24797229	ELECTROLYTIC, 50V 2.2UF M
CD08	24794221	ELECTROIYTIC, 16V 220UF M
CD09	24232103	CERAMIC DISC, 50V F 10000PF Z
CD10	24797479	ELECTROLYTIC, 50V 4.7UF M
CD11	24797479	ELECTROLYTIC, 50V 4.7UF M
CD12	24797479	ELECTROLYTIC, 50V 4.7UF M
CD13	24797479	ELECTROLYTIC, 50V 4.7UF M
CD14	24797479	ELECTROLYTIC, 50V 4.7UF M
CD15	24797479	ELECTROLYTIC, 50V 4.7UF M
CD16	24797479	ELECTROLYTIC, 50V 4.7UF M
CD17	24503045	PLASTIC FILM, 63V 0.22UF J
CD18	24590102	PLASTIC FILM, 50V 1000PF J
CD19	24567333	PLASTIC FILM, 50V 33000PF J
CD20	24503039	PLASTIC FILM, 63V 0.068UF J
CD21	24539104	PLASTIC FILM, 50V 0.1UF J
CD22	24797479	ELECTROLYTIC, 50V 4.7UF M
CD23	24797479	ELECTROLYTIC, 50V 4.7UF M
CD24	24590103	PLASTIC FILM, 50V 0.01MF J
CD25	24590103	PLASTIC FILM, 50V 0.01MF J
CD26	24590103	PLASTIC FILM, 50V 0.01MF J
CD41	24503041	PLASTIC FILM , 63V 0.1UF J
CD42	24590103	PLASTIC FILM, 50V 0.01MF J
CD43	24503041	PLASTIC FILM , 63V 0.1UF J
CD44	24503041	PLASTIC FILM , 63V 0.1UF J
CD45	24503049	PLASTIC FILM, 63V 0.47UF J
CD46	24503049	PLASTIC FILM, 63V 0.47UF J
CD47	24503047	PLASTIC FILM, 63V 0.33UF J
CD48	24503047	PLASTIC FILM, 63V 0.33UF J
CD49	24797010	ELECTROLYTIC, 50V 1UF M
CD60	24797100	ELECTROLYTIC, 50V 10UF M
CD61	24590333	PLASTIC FILM, 50V 0.033UF J
CD62	24590103	PLASTIC FILM, 50V 0.01MF J
CD63	24503049	PLASTIC FILM, 63V 0.47UF J
CD64	24539334	PLASTIC FILM, 50V 0.33UF J
CD65	24436221	CERAMIC DISC, 50V SL 220PF J
CD70	24794221	ELECTROIYTIC, 16V 220UF M
CD71	24232103	CERAMIC DISC, 50V F 10000PF Z
CD73	24797100	ELECTROLYTIC, 50V 10UF M
CD74	24794221	ELECTROIYTIC, 16V 220UF M
CD75	24797100	ELECTROLYTIC, 50V 10UF M
CD76	24797100	ELECTROLYTIC, 50V 10UF M
CD77	24797100	ELECTROLYTIC, 50V 10UF M
CD81	24503041	PLASTIC FILM , 63V 0.1UF J
CD82	24503041	PLASTIC FILM , 63V 0.1UF J
CD83	24503041	PLASTIC FILM , 63V 0.1UF J
CD84	24503041	PLASTIC FILM , 63V 0.1UF J
CD89	24797479	ELECTROLYTIC, 50V 4.7UF M
CH001	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH004	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH005	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH006	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH007	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH008	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH009	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH010	24092743	CERAMIC CHIP, 10V F 470NF Z
CH011	24762221	ELECTROLYTIC, 10V 220UF M
CH012	24763101	ELECTROLYTIC, 16V 100UF M
CH013	24763101	ELECTROLYTIC, 16V 100UF M
CH014	24108101	CERAMIC CHIP, 50V SL 100PF J
CH015	24108330	CERAMIC CHIP, 50V SL 33PF J
CH016	24108330	CERAMIC CHIP, 50V SL 33PF J
CH017	24108330	CERAMIC CHIP, 50V SL 33PF J
CH018	24108330	CERAMIC CHIP, 50V SL 33PF J
CH019	24108330	CERAMIC CHIP, 50V SL 33PF J
CH020	24108330	CERAMIC CHIP, 50V SL 33PF J
CH040	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH041	24108101	CERAMIC CHIP, 50V SL 100PF J
CH042	24108101	CERAMIC CHIP, 50V SL 100PF J
CH043	24108101	CERAMIC CHIP, 50V SL 100PF J
CH044	24108101	CERAMIC CHIP, 50V SL 100PF J
CH051	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH052	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH053	24105070	CERAMIC CHIP CC73CH 50V 7PF D
CH061	24109103	CERAMIC CHIP, 50V B 0.01UF K
CH062	24092730	CERAMIC CHIP, 16V B 0.1UF K
CH063	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH101	24105070	CERAMIC CHIP CC73CH 50V 7PF D
CH102	24105070	CERAMIC CHIP CC73CH 50V 7PF D
CH241	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH244	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH247	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH249	24092730	CERAMIC CHIP, 16V B 0.1UF K
CH250	24092730	CERAMIC CHIP, 16V B 0.1UF K
CH301	24109472	CERAMIC CHIP, 50V B 4700PF K
CH302	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH303	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH304	24109472	CERAMIC CHIP, 50V B 4700PF K
CH305	24567104	PLASTIC FILM, 50V 0.1UF J
CH306	24567104	PLASTIC FILM, 50V 0.1UF J
CH307	24109472	CERAMIC CHIP, 50V B 4700PF K
CH308	24100104	CERAMIC CHIP, 25V F 0.1UF Z

Location No.	Parts No.	Description
CH309	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH310	24109472	CERAMIC CHIP, 50V B 4700PF K
CH311	24567104	PLASTIC FILM, 50V 0.1UF J
CH312	24567104	PLASTIC FILM, 50V 0.1UF J
CH313	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH314	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH315	24567104	PLASTIC FILM, 50V 0.1UF J
CH316	24567104	PLASTIC FILM, 50V 0.1UF J
CH317	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH318	24567104	PLASTIC FILM, 50V 0.1UF J
CH319	24567104	PLASTIC FILM, 50V 0.1UF J
CH320	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH321	24763101	ELECTROLYTIC, 16V 100UF M
CH322	24763101	ELECTROLYTIC, 16V 100UF M
CH401	24105220	CERAMIC CHIP, 50V CH 22PF J
CH402	24105220	CERAMIC CHIP, 50V CH 22PF J
CH403	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH404	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH407	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH408	24794100	ELECTROLYTIC, 16V 10UF M
CH409	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH413	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH414	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH501	24794470	ELECTORLYTIC, 16V 47UF M
CH502	24794470	ELECTORLYTIC, 16V 47UF M
CH503	24794470	ELECTORLYTIC, 16V 47UF M
CH504	24794470	ELECTORLYTIC, 16V 47UF M
CH505	24794470	ELECTORLYTIC, 16V 47UF M
CH506	24794470	ELECTORLYTIC, 16V 47UF M
CH511	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH512	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH513	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH514	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH515	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH516	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH517	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH518	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CH521	24105100	CERAMIC CHIP, 50V CH 10PF D
CH522	24590222	PLASTIC FILM, 50V 2200PF J
CH523	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH524	24105821	CERAMIC CHIP, 25V CH 820PF J
CH526	24105050	CERAMIC CHIP, 50V CH 5PF C
CH527	24105181	CERAMIC CHIP, 50V CH 180PF J
CH541	24105100	CERAMIC CHIP, 50V CH 10PF D
CH542	24590222	PLASTIC FILM, 50V 2200PF J
CH543	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH544	24105821	CERAMIC CHIP, 25V CH 820PF J
CH546	24105050	CERAMIC CHIP, 50V CH 5PF C
CH547	24105181	CERAMIC CHIP, 50V CH 180PF J
CH561	24105100	CERAMIC CHIP, 50V CH 10PF D
CH562	24590222	PLASTIC FILM, 50V 2200PF J
CH563	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH564	24105821	CERAMIC CHIP, 25V CH 820PF J
CH566	24105050	CERAMIC CHIP, 50V CH 5PF C
CH567	24105181	CERAMIC CHIP, 50V CH 180PF J
CH621	24105100	CERAMIC CHIP, 50V CH 10PF D
CH622	24590222	PLASTIC FILM, 50V 2200PF J
CH623	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH624	24105821	CERAMIC CHIP, 25V CH 820PF J
CH626	24105050	CERAMIC CHIP, 50V CH 5PF C
CH627	24105181	CERAMIC CHIP, 50V CH 180PF J
CH641	24105100	CERAMIC CHIP, 50V CH 10PF D
CH642	24590222	PLASTIC FILM, 50V 2200PF J
CH643	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH644	24105821	CERAMIC CHIP, 25V CH 820PF J

Location No.	Parts No.	Description
CH646	24105050	CERAMIC CHIP, 50V CH 5PF C
CH647	24105181	CERAMIC CHIP, 50V CH 180PF J
CH661	24105100	CERAMIC CHIP, 50V CH 10PF D
CH662	24590222	PLASTIC FILM, 50V 2200PF J
CH663	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CH664	24105821	CERAMIC CHIP, 25V CH 820PF J
CH666	24105050	CERAMIC CHIP, 50V CH 5PF C
CH667	24105181	CERAMIC CHIP, 50V CH 180PF J
CH707	24794470	ELECTORLYTIC, 16V 47UF M
CR12	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR13	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR14	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR15	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR16	24092730	CERAMIC CHIP, 16V B 0.1UF K
CR17	24092730	CERAMIC CHIP, 16V B 0.1UF K
CS03	24109221	CERAMIC CHIP CK73B 50V 220PF K
CS04	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CS07	24109221	CERAMIC CHIP CK73B 50V 220PF K
CS08	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CS09	24105331	CERAMIC CHIP, 50V CH 330PF J
CS10	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS11	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CS12	24109221	CERAMIC CHIP CK73B 50V 220PF K
CS13	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CS14	24109221	CERAMIC CHIP CK73B 50V 220PF K
CS15	24105331	CERAMIC CHIP, 50V CH 330PF J
CS16	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS21	24105101	CERAMIC CHIP, 50V CH 100PF J
CS22	24105101	CERAMIC CHIP, 50V CH 100PF J
CS24	24105331	CERAMIC CHIP, 50V CH 330PF J
CS25	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS28	24105331	CERAMIC CHIP, 50V CH 330PF J
CS29	24105331	CERAMIC CHIP, 50V CH 330PF J
CS32	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CS33	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CS34	24105331	CERAMIC CHIP, 50V CH 330PF J
CS35	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS36	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS38	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS43	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CS45	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CS51	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS52	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS53	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS54	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS55	24105331	CERAMIC CHIP, 50V CH 330PF J
CS56	24105331	CERAMIC CHIP, 50V CH 330PF J
CS57	24105331	CERAMIC CHIP, 50V CH 330PF J
CS58	24105331	CERAMIC CHIP, 50V CH 330PF J
CS60	24503041	PLASTIC FILM , 63V 0.1UF J
CS91	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS92	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS93	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS94	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CS95	24763101	ELECTROLYTIC, 16V 100UF M
CS96	24109103	CERAMIC CHIP, 50V B 0.01UF K
CS122	24797101	ELECTROLYTIC, 50V 100UF M
CS123	24797470	ELECTROLYTIC, 50V 47UF M
CS124	24797229	ELECTROLYTIC, 50V 2.2UF M
CS125	24590103	PLASTIC FILM, 50V 0.01MF J
CS652	24794220	ELECTROLYTIC, 16V 22UF M
CS676	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV01	24085981	ELEC. NONPOLAR CE04J 16V 10UF M 11L NP
CV02	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV03	24085981	ELEC. NONPOLAR CE04J 16V 10UF M 11L NP

Location No.	Parts No.	Description
CV04	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV05	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV08	24666471	ELECTROLYTIC, 16V 470UF M 3A
CV09	24666471	ELECTROLYTIC, 16V 470UF M 3A
CV10	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV13	24794100	ELECTROLYTIC, 16V 10UF M
CV14	24232103	CERAMIC DISC, 50V F 10000PF Z
CV15	24232103	CERAMIC DISC, 50V F 10000PF Z
CV17	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV21	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV22	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV23	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV24	24109102	CERAMIC CHIP, 50V B 1000PF K
CV27	24762471	ELECTROLYTIC, 10V 470UF M
CV29	24763101	ELECTROLYTIC, 16V 100UF M
CV30	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV37	24797339	ELECTROLYTIO, 50V 3.3UF M
CV38	24203101	ELECTROLYTIC, 16V 100UF M 7L 3A
CV39	24109102	CERAMIC CHIP, 50V B 1000PF K
CV46	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV60	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV61	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV62	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV63	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV64	24206100	ELECTROLYTIC, 50V 10UF M 7L 3A
CV65	24591122	PLASTIC FILM, 50V 1200PF J
CV66	24105561	CERAMIC CHIP, 50V CH 560PF J
CV67	24591102	PLASTIC FILM, 50V 1000PF J
CV68	24206010	ELECTROLYTIC, 50V 1.0UF M 7L 3A
CV77	24763222	ELECTROLYTIC CE04G 16V 2200UF M
CV78	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV82	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV83	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV84	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV85	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV86	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV87	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV90	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV91	24763101	ELECTROLYTIC, 16V 100UF M
CV100	24206229	ELECTROLYTIC, 50V 2.2UF M 7L 3A
CV135	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV136	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV137	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CV138	24203470	ELECTROLYTIC, 16V 47UF M 7L 3A
CW09	24109103	CERAMIC CHIP, 50V B 0.01UF K
CX91	24092538	CERAMIC CHIP, 10V F 1UF Z
CY40	24206100	ELECTROLYTIC, 50V 10UF M 7L 3A

RESISTORS

Location No.	Parts No.	Description
R101	24383183	OXIDE METAL FILM, 2W 18K OHM J
R119	24000445	CHIP JUMPER, 1608TYPE
R150	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R151	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
R152	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R171	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R172	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
R173	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R174	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
R201	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R202	24872102	CHIP, METAL FILM, 1/16W 1K OHM J
R203	24872102	CHIP, METAL FILM, 1/16W 1K OHM J
R204	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R205	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
R205	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R206	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R207	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R208	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R209	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R210	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R211	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R212	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R213	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R214	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R215	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R216	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R217	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R218	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R219	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R220	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R221	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R222	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R223	24011302	CHIP, METAL FILM, 1/20W 3K OHM J
R224	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R225	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R226	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R227	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R228	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R229	24872750	CHIP, METAL FILM, 1/16W 75 OHM J
R230	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R231	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
R233	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R234	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R235	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R236	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R237	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R238	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R239	24019436	CHIP BLOCK, 1/16W P-8 22 OHM J
R240	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R241	24367153	CARBON FILM, 1/6W 15K OHM G
R241	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R242	24367333	CARBON FILM, 1/6W 33K OHM G
R242	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R243	24367223	CARBON FILM, 1/6W 22K OHM G
R243	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R244	24367223	CARBON FILM, 1/6W 22K OHM G
R244	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R245	24366124	CARBON FILM, 1/6W 120K OHM J
R245	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R246	24366102	CARBON FILM, 1/6W 1K OHM J
R246	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R247	24366474	CARBON FILM, 1/6W 470K OHM J
R247	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R248	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R249	24366472	CARBON FILM, 1/6W 4.7K OHM J
R249	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R250	24366472	CARBON FILM, 1/6W 4.7K OHM J
R250	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R251	24366101	CARBON FILM, 1/6W 100 OHM J
R251	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R252	24366103	CARBON FILM, 1/6W 10K OHM J
R252	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R253	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R254	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R255	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R256	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R257	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R258	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R259	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R301	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R302	24011102	CHIP, METAL FILM, 1/20W 1K OHM J

Location No.	Parts No.	Description
R303	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R304	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R305	24321129	OXIDE METAL FILM, 1/2W 1.2 OHM J
R306	24382151	OXIDE METAL FILM, 1W 150 OHM J
R307	24322828	OXIDE METAL FILM, 1W 0.82 OHM J
R308	24382391	OXIDE METAL FILM, 1W 390 OHM J
R309	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R310	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R311	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R312	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R313	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R314	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R315	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R317	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R321	24366103	CARBON FILM, 1/6W 10K OHM J
R322	24366101	CARBON FILM, 1/6W 100 OHM J
R323	24366103	CARBON FILM, 1/6W 10K OHM J
R324	24366183	CARBON FILM, 1/6W 18K OHM J
R325	24366113	CARBON FILM, 1/6W 11K OHM J
R326	24366471	CARBON FILM, 1/6W 470 OHM J
R327	24366471	CARBON FILM, 1/6W 470 OHM J
R328	24366562	CARBON FILM, 1/6W 5.6K OHM J
R329	24366103	CARBON FILM, 1/6W 10K OHM J
R331	24366473	CARBON FILM, 1/6W 47K OHM J
R332	24366821	CARBON FILM, 1/6W 820 OHM J
R333	24366102	CARBON FILM, 1/6W 1K OHM J
R334	24366153	CARBON FILM, 1/6W 15K OHM J
R335	24000245	METAL FILM, 1/4W 33K OHM F
R336	24000368	METAL FILM, 1/4W 2.7K OHM F
R337	24000203	METAL FILM, 1/4W 27K F
⚠ R338	24366103	CARBON FILM, 1/6W 10K OHM J
R339	24366472	CARBON FILM, 1/6W 4.7K OHM J
R341	24366472	CARBON FILM, 1/6W 4.7K OHM J
R342	24000633	METAL FILM, 1/4W 10K OHM F
R343	24366103	CARBON FILM, 1/6W 10K OHM J
R344	24366123	CARBON FILM, 1/6W 12K OHM J
R345	24000633	METAL FILM, 1/4W 10K OHM F
R346	24019119	METAL FILM, 1/6W 30K OHM J
R347	24019119	METAL FILM, 1/6W 30K OHM J
R348	24000525	METAL FILM, 1/4W 4.7K OHM F
R349	24366103	CARBON FILM, 1/6W 10K OHM J
R351	24366153	CARBON FILM, 1/6W 15K OHM J
R352	24366273	CARBON FILM, 1/6W 27K OHM J
R353	24366824	CARBON FILM, 1/6W 820K OHM J
R354	24366273	CARBON FILM, 1/6W 27K OHM J
R355	24366822	CARBON FILM, 1/6W 8.2K OHM J
R356	24366102	CARBON FILM, 1/6W 1K OHM J
R357	24366100	CARBON FILM, 1/6W 10 OHM J
R358	24366103	CARBON FILM, 1/6W 10K OHM J
R359	24366392	CARBON FILM, 1/6W 3.9K OHM J
R361	24366123	CARBON FILM, 1/6W 12K OHM J
R362	24366103	CARBON FILM, 1/6W 10K OHM J
R363	24366103	CARBON FILM, 1/6W 10K OHM J
R365	24366682	CARBON FILM, 1/6W 6.8K OHM J
R366	24366103	CARBON FILM, 1/6W 10K OHM J
R367	24366103	CARBON FILM, 1/6W 10K OHM J
R368	24366102	CARBON FILM, 1/6W 1K OHM J
R369	24366103	CARBON FILM, 1/6W 10K OHM J
R371	24366823	CARBON FILM, 1/6W 82K OHM J
R372	24366332	CARBON FILM, 1/6W 3.3K OHM J
R373	24366823	CARBON FILM, 1/6W 82K OHM J
R374	24366104	CARBON FILM, 1/6W 100K OHM J
R375	24366153	CARBON FILM, 1/6W 15K OHM J
R376	24366333	CARBON FILM, 1/6W 33K OHM J
R377	24366103	CARBON FILM, 1/6W 10K OHM J

Location No.	Parts No.	Description
R378	24366682	CARBON FILM, 1/6W 6.8K OHM J
R379	24366103	CARBON FILM, 1/6W 10K OHM J
R381	24366102	CARBON FILM, 1/6W 1K OHM J
R382	24366103	CARBON FILM, 1/6W 10K OHM J
R383	24366222	CARBON FILM, 1/6W 2.2K OHM J
R384	24019090	METAL FILM, 1/4W 330K OHM F
R385	24000633	METAL FILM, 1/4W 10K OHM F
R386	24000639	METAL FILM, 1/4W 22K OHM F
R388	24000141	METAL FILM, 1/4W 220 F
R401	24366223	CARBON FILM, 1/6W 22K OHM J
R402	24366223	CARBON FILM, 1/6W 22K OHM J
R403	24553101	OXIDE METAL FILM, 1W 100 OHM J
R404	24383101	OXIDE METAL FILM, 2W 100 OHM J
R405	24366103	CARBON FILM, 1/6W 10K OHM J
R406	24382222	OXIDE METAL FILM, 1W 2.2K OHM J
R407	24381100	OXIDE METAL FILM, 1/2W 10 OHM J
R408	24366101	CARBON FILM, 1/6W 100 OHM J
R409	24555220	OXIDE METAL FILM, 3W 22 OHM J
R410	24555220	OXIDE METAL FILM, 3W 22 OHM J
R411	24323479	METAL FILM, 2W 4.7 OHM J
R412	24366101	CARBON FILM, 1/6W 100 OHM J
R413	24366272	CARBON FILM, 1/6W 2.7K OHM J
R414	24366101	CARBON FILM, 1/6W 100 OHM J
R415	24533331	FUSIBLE, 2W 330 OHM J
R417	24366101	CARBON FILM, 1/6W 100 OHM J
R418	24366332	CARBON FILM, 1/6W 3.3K OHM J
R419	24942102	CARBON COMPOSITION, 1/2W 1K OHM J
R420	24382473	OXIDE METAL FILM, 1W 47K OHM J
R421	24377224	CARBON FILM, 1W 220K OHM J
R422	24376104	CARBON FILM, 1/2W 10OK OHM J
R423	24376104	CARBON FILM, 1/2W 10OK OHM J
R424	24322398	OXIDE METAL FILM, 1W 0.39 OHM J
R425	24366101	CARBON FILM, 1/6W 100 OHM J
R427	24942102	CARBON COMPOSITION, 1/2W 1K OHM J
R428	24310109	OXIDE METAL FILM, 1/2W 1 OHM J
R430	24383153	OXIDE METAL FILM, 2W 15K OHM J
R431	24383102	OXIDE METAL FILM, 2W 1K OHM J
R432	24376274	CARBON FILM, 1/2W 270K OHM J
R433	24376274	CARBON FILM, 1/2W 270K OHM J
R434	24376274	CARBON FILM, 1/2W 270K OHM J
R435	24366101	CARBON FILM, 1/6W 100 OHM J
R436	24382561	OXIDE METAL FILM, 1W 560 OHM J
R437	24382561	OXIDE METAL FILM, 1W 560 OHM J
R438	24382561	OXIDE METAL FILM, 1W 560 OHM J
R439	24366103	CARBON FILM, 1/6W 10K OHM J
R440	24366103	CARBON FILM, 1/6W 10K OHM J
R441	24366474	CARBON FILM, 1/6W 470K OHM J
R442	24366103	CARBON FILM, 1/6W 10K OHM J
R443	24366562	CARBON FILM, 1/6W 5.6K OHM J
R444	24366562	CARBON FILM, 1/6W 5.6K OHM J
R445	24366472	CARBON FILM, 1/6W 4.7K OHM J
R446	24366103	CARBON FILM, 1/6W 10K OHM J
R447	24366152	CARBON FILM, 1/6W 1.5K OHM J
R448	24366333	CARBON FILM, 1/6W 33K OHM J
R449	24366223	CARBON FILM, 1/6W 22K OHM J
R451	24366103	CARBON FILM, 1/6W 10K OHM J
R452	24366103	CARBON FILM, 1/6W 10K OHM J
R453	24366472	CARBON FILM, 1/6W 4.7K OHM J
R454	24366562	CARBON FILM, 1/6W 5.6K OHM J
R455	24019259	FUSIBLE, 1/4W 27 OHM G
R456	24366224	CARBON FILM, 1/6W 220K OHM J
R457	24366223	CARBON FILM, 1/6W 22K OHM J
R459	24366392	CARBON FILM, 1/6W 3.9K OHM J
R461	24366103	CARBON FILM, 1/6W 10K OHM J
R462	24366222	CARBON FILM, 1/6W 2.2K OHM J

Location No.	Parts No.	Description
R463	24366103	CARBON FILM, 1/6W 10K OHM J
R464	24366332	CARBON FILM, 1/6W 3.3K OHM J
R465	24366474	CARBON FILM, 1/6W 470K OHM J
R466	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R467	24366472	CARBON FILM, 1/6W 4.7K OHM J
R481	24322568	OXIDE METAL FILM, 1W 0.56 OHM J
R482	24552271	OXIDE METAL FILM, 1/2W 270 OHM J
R483	24552151	OXIDE METAL FILM, 1/2W 150 OHM J
R484	24366102	CARBON FILM, 1/6W 1K OHM J
R485	24000141	METAL FILM, 1/4W 220 F
⚠ R486	24000360	METAL FILM, 1/4W 1.2K OHM F
⚠ R487	24000147	METAL FILM, 1/4W 470 OHM F
R488	24366103	CARBON FILM, 1/6W 10K OHM J
R489	24366100	CARBON FILM, 1/6W 10 OHM J
R505	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R520	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R521	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R522	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R523	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R524	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R525	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R526	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R527	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R530	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R531	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R532	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R533	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R534	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R535	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R536	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R537	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R538	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R539	24552221	OXIDE METAL FILM, 1/2W 220 OHM J
R540	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R541	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R542	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R543	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R544	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R545	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R546	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R563	24011560	CHIP, METAL FILM, 1/20W 56 OHM J
R564	24011560	CHIP, METAL FILM, 1/20W 56 OHM J
R565	24011560	CHIP, METAL FILM, 1/20W 56 OHM J
R601	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R602	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R603	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
R604	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
R609	24366229	CARBON FILM, 1/6W 2.2 OHM J
R610	24366229	CARBON FILM, 1/6W 2.2 OHM J
R611	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
R612	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
R613	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R661	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R662	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
R663	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R665	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R666	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R667	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R668	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R669	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R671	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R672	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
R673	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R674	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R682	24011473	CHIP, METAL FILM, 1/20W 47K OHM J

Location No.	Parts No.	Description
R683	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R684	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R687	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R689	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R690	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R691	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R692	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R693	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R695	24000445	CHIP JUMPER, 1608TYPE
R702	24552221	OXIDE METAL FILM, 1/2W 220 OHM J
R709	24366563	CARBON FILM, 1/6W 56K OHM J
R713	24366273	CARBON FILM, 1/6W 27K OHM J
R715	24366333	CARBON FILM, 1/6W 33K OHM J
R716	24366273	CARBON FILM, 1/6W 27K OHM J
R717	24366333	CARBON FILM, 1/6W 33K OHM J
R718	24366101	CARBON FILM, 1/6W 100 OHM J
R719	24366100	CARBON FILM, 1/6W 10 OHM J
R720	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R722	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R723	24366101	CARBON FILM, 1/6W 100 OHM J
R724	24366151	CARBON FILM, 1/6W 150 OHM J
R725	24366332	CARBON FILM, 1/6W 3.3K OHM J
R730	24552100	OXIDE METAL FILM, 1/2W 10 OHM J
R731	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R732	24366470	CARBON FILM, 1/6W 47 OHM J
R733	24366683	CARBON FILM, 1/6W 68K OHM J
R734	24366470	CARBON FILM, 1/6W 47 OHM J
R735	24366683	CARBON FILM, 1/6W 68K OHM J
R736	24553330	OXIDE METAL FILM, 1W 33 OHM J
R737	24366751	CARBON FILM, 1/6W 750 OHM J
R738	24366102	CARBON FILM, 1/6W 1K OHM J
R739	24366751	CARBON FILM, 1/6W 750 OHM J
R740	24553330	OXIDE METAL FILM, 1W 33 OHM J
R741	24322229	OXIDE METAL FILM, 1W 2.2 OHM J
R742	24321229	OXIDE METAL FILM, 1/2W 2.2 OHM J
R743	24554221	OXIDE METAL FILM, 2W 220 OHM J
R744	24366122	CARBON FILM, 1/6W 1.2K OHM J
R745	24366122	CARBON FILM, 1/6W 1.2K OHM J
R755	24366333	CARBON FILM, 1/6W 33K OHM J
R761	24366273	CARBON FILM, 1/6W 27K OHM J
R762	24366563	CARBON FILM, 1/6W 56K OHM J
R763	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R764	24366470	CARBON FILM, 1/6W 47 OHM J
R765	24552100	OXIDE METAL FILM, 1/2W 10 OHM J
R766	24366470	CARBON FILM, 1/6W 47 OHM J
R767	24552221	OXIDE METAL FILM, 1/2W 220 OHM J
R768	24366751	CARBON FILM, 1/6W 750 OHM J
R769	24366122	CARBON FILM, 1/6W 1.2K OHM J
R770	24553330	OXIDE METAL FILM, 1W 33 OHM J
R771	24322229	OXIDE METAL FILM, 1W 2.2 OHM J
R772	24366683	CARBON FILM, 1/6W 68K OHM J
R773	24366683	CARBON FILM, 1/6W 68K OHM J
R774	24366751	CARBON FILM, 1/6W 750 OHM J
R775	24366122	CARBON FILM, 1/6W 1.2K OHM J
R776	24553330	OXIDE METAL FILM, 1W 33 OHM J
R777	24321229	OXIDE METAL FILM, 1/2W 2.2 OHM J
R778	24366102	CARBON FILM, 1/6W 1K OHM J
R779	24554221	OXIDE METAL FILM, 2W 220 OHM J
R781	24366273	CARBON FILM, 1/6W 27K OHM J
R782	24366563	CARBON FILM, 1/6W 56K OHM J
R783	24552221	OXIDE METAL FILM, 1/2W 220 OHM J
R784	24552100	OXIDE METAL FILM, 1/2W 10 OHM J
R785	24366470	CARBON FILM, 1/6W 47 OHM J
R786	24366751	CARBON FILM, 1/6W 750 OHM J
R787	24366122	CARBON FILM, 1/6W 1.2K OHM J

Location No.	Parts No.	Description
R788	24366683	CARBON FILM, 1/6W 68K OHM J
R789	24366683	CARBON FILM, 1/6W 68K OHM J
R790	24366751	CARBON FILM, 1/6W 750 OHM J
R791	24366122	CARBON FILM, 1/6W 1.2K OHM J
R792	24366102	CARBON FILM, 1/6W 1K OHM J
R793	24321229	OXIDE METAL FILM, 1/2W 2.2 OHM J
R794	24553330	OXIDE METAL FILM, 1W 33 OHM J
R795	24322229	OXIDE METAL FILM, 1W 2.2 OHM J
R796	24554221	OXIDE METAL FILM, 2W 220 OHM J
R797	24366470	CARBON FILM, 1/6W 47 OHM J
R798	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R799	24553330	OXIDE METAL FILM, 1W 33 OHM J
R810	24045011	CEMENT RES G 20W 1R2J
R818	24366102	CARBON FILM, 1/6W 1K OHM J
R819	24366103	CARBON FILM, 1/6W 10K OHM J
R829	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R840	24552562	OXIDE METAL FILM, 1/2W 5.6K OHM J
R841	24366102	CARBON FILM, 1/6W 1K OHM J
R842	24376563	CARB0N FILM, 1/2W 56K OHM J
R843	24376563	CARB0N FILM, 1/2W 56K OHM J
R844	24366103	CARBON FILM, 1/6W 10K OHM J
R861	24382153	OXIDE METAL FILM, 1W 15K OHM J
R862	24381330	OXIDE FILM, 1/2W 33 J
R864	24552102	OXIDE METAL FILM, 1/2W 1K OHM J
R865	24552470	OXIDE METAL FILM, 1/2W 47 OHM J
R866	24366103	CARBON FILM, 1/6W 10K OHM J
R867	24366223	CARBON FILM, 1/6W 22K OHM J
R868	24552560	OXIDE METAL FILM, 1/2W 56 OHM J
R870	24381271	OXIDE METAL FILM, 1/2W 270 OHM J
R871	24382820	OXIDE METAL FILM, 1W 82 OHM J
R872	24382124	OXIDE METAL FILM, 1W 120K OHM J
R873	24366150	CARBON FILM, 1/6W 15 OHM J
R882	24366101	CARBON FILM, 1/6W 100 OHM J
R883	24381682	OXIDE METAL FILM, 1/2W 6.8K OHM J
R884	24366222	CARBON FILM, 1/6W 2.2K OHM J
R891	24366473	CARBON FILM, 1/6W 47K OHM J
R899	24010001	CARBON FILM, 1/2W 3.9M OHM J
R900	24000907	FUSIBLE, 1W 3.9 OHM J
R901	24366101	CARBON FILM, 1/6W 100 OHM J
R903	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R905	24366270	CARBON FILM, 1/6W 27 OHM J
R906	24366271	CARBON FILM, 1/6W 270 OHM J
R908	24366680	CARBON FILM, 1/6W 68 OHM J
R909	24366180	CARBON FILM, 1/6W 18 OHM J
R911	24366101	CARBON FILM, 1/6W 100 OHM J
R913	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R915	24366270	CARBON FILM, 1/6W 27 OHM J
R916	24366271	CARBON FILM, 1/6W 270 OHM J
R918	24366680	CARBON FILM, 1/6W 68 OHM J
R919	24366180	CARBON FILM, 1/6W 18 OHM J
R920	24366222	CARBON FILM, 1/6W 2.2K OHM J
R921	24366101	CARBON FILM, 1/6W 100 OHM J
R923	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R925	24366180	CARBON FILM, 1/6W 18 OHM J
R926	24366271	CARBON FILM, 1/6W 270 OHM J
R927	24366100	CARBON FILM, 1/6W 10 OHM J
R928	24366680	CARBON FILM, 1/6W 68 OHM J
R929	24366270	CARBON FILM, 1/6W 27 OHM J
R930	24366222	CARBON FILM, 1/6W 2.2K OHM J
R931	24568472	CERAMIC COVERED G 7W 4.7K J
R932	24568472	CERAMIC COVERED G 7W 4.7K J
R933	24366560	CARBON FILM, 1/6W 56 OHM J
R934	24366560	CARBON FILM, 1/6W 56 OHM J
R938	24366150	CARBON FILM, 1/6W 15 OHM J
R941	24568472	CERAMIC COVERED G 7W 4.7K J

Location No.	Parts No.	Description
R942	24568472	CERAMIC COVERED G 7W 4.7K J
R943	24366560	CARBON FILM, 1/6W 56 OHM J
R944	24366560	CARBON FILM, 1/6W 56 OHM J
R945	24366150	CARBON FILM, 1/6W 15 OHM J
R948	24366222	CARBON FILM, 1/6W 2.2K OHM J
R950	24366222	CARBON FILM, 1/6W 2.2K OHM J
R951	24568472	CERAMIC COVERED G 7W 4.7K J
R952	24568472	CERAMIC COVERED G 7W 4.7K J
R953	24366560	CARBON FILM, 1/6W 56 OHM J
R954	24366560	CARBON FILM, 1/6W 56 OHM J
R958	24366150	CARBON FILM, 1/6W 15 OHM J
R961	24366122	CARBON FILM, 1/6W 1.2K OHM J
R962	24366471	CARBON FILM, 1/6W 470 OHM J
R963	24366100	CARBON FILM, 1/6W 10 OHM J
R964	24366332	CARBON FILM, 1/6W 3.3K OHM J
R965	24366101	CARBON FILM, 1/6W 100 OHM J
R966	24366331	CARBON FILM, 1/6W 330 OHM J
R967	24366681	CARBON FILM, 1/6W 680 OHM J
R968	24366222	CARBON FILM, 1/6W 2.2K OHM J
R978	24366222	CARBON FILM, 1/6W 2.2K OHM J
R987	24366101	CARBON FILM, 1/6W 100 OHM J
R988	24366222	CARBON FILM, 1/6W 2.2K OHM J
R991	24366222	CARBON FILM, 1/6W 2.2K OHM J
R992	24366222	CARBON FILM, 1/6W 2.2K OHM J
R995	24366330	CARBON FILM, 1/6W 33 OHM J
R4005	24366102	CARBON FILM, 1/6W 1K OHM J
R4010	24366102	CARBON FILM, 1/6W 1K OHM J
R4011	24366223	CARBON FILM, 1/6W 22K OHM J
R4012	24366223	CARBON FILM, 1/6W 22K OHM J
R4013	24366103	CARBON FILM, 1/6W 10K OHM J
R4014	24366222	CARBON FILM, 1/6W 2.2K OHM J
R4015	24000633	METAL FILM, 1/4W 10K OHM F
R4016	24366105	CARBON FILM, 1/6W 1M OHM J
R4017	24000639	METAL FILM, 1/4W 22K OHM F
R4018	24000203	METAL FILM, 1/4W 27K F
R4020	24000370	METAL FILM, 1/4W 3.3K OHM F
R4021	24000637	METAL FILM, 1/4W 15K OHM F
R4022	24000368	METAL FILM, 1/4W 2.7K OHM F
R4023	24366472	CARBON FILM, 1/6W 4.7K OHM J
R4024	24000203	METAL FILM, 1/4W 27K F
R4025	24000364	METAL FILM, 1/4W 1.8K OHM F
R4026	24383470	OXIDE METAL FILM, 2W 47 OHM J
R4030	24366102	CARBON FILM, 1/6W 1K OHM J
R4031	24366562	CARBON FILM, 1/6W 5.6K OHM J
R4032	24000639	METAL FILM, 1/4W 22K OHM F
R4033	24000147	METAL FILM, 1/4W 470 OHM F
R4034	24066864	VARIABLE RESISTOR
R4035	24000372	METAL FILM, 1/4W 3.9K OHM F
R4036	24366102	CARBON FILM, 1/6W 1K OHM J
R4502	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R4503	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4505	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R4506	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4507	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4508	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4509	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4513	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4514	24000824	CHIP JUMPER, 2125TYPE
R4515	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
R4516	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4517	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4521	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4522	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4523	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4524	24011103	CHIP, METAL FILM, 1/20W 10K OHM J

Location No.	Parts No.	Description
R4525	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4527	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4528	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4531	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4532	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R4533	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
R4534	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R4535	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R4536	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R4538	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4539	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R4541	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R4542	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
R4545	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4546	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4551	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4552	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4553	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R7707	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7708	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7710	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7711	24547189	FUSIBLE, 1W 1.8 OHM J
R7712	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7713	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7715	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7716	24547189	FUSIBLE, 1W 1.8 OHM J
R7717	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7718	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7720	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7721	24547189	FUSIBLE, 1W 1.8 OHM J
R7722	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7723	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7725	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7726	24547189	FUSIBLE, 1W 1.8 OHM J
R7727	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7728	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7730	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7731	24547189	FUSIBLE, 1W 1.8 OHM J
R7732	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7733	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7735	24383221	OXIDE METAL FILM, 2W 220 OHM J
R7736	24547189	FUSIBLE, 1W 1.8 OHM J
R7766	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R7767	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
R7775	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R7776	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7777	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R7778	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7779	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7780	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7781	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R7793	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
R7797	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7798	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7799	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R7836	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7837	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7841	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7842	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7843	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7844	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7845	24871102	CHIP, METAL FILM, 1/8W 1K OHM J
R7846	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7847	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7848	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J

Location No.	Parts No.	Description
R7849	24871102	CHIP, METAL FILM, 1/8W 1K OHM J
R7861	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7862	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7864	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7865	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7866	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7867	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R7868	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
R7871	24000358	METAL FILM, 1/4W 1K OHM F
R7872	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7880	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7881	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7882	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7883	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7884	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7885	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
R7886	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
R7887	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7888	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R7889	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
R7890	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R7891	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R7893	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R7894	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7895	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7896	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7897	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R7898	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7899	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7904	24000247	METAL FILM, 1/4W 39K OHM F
R7906	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R7910	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R7911	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7912	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7913	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R7914	24381182	OXIDE METAL FILM, 1/2W 1.8K OHM J
R9028	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R9085	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R9086	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
R9501	24366101	CARBON FILM, 1/6W 100 OHM J
R9503	24366681	CARBON FILM, 1/6W 680 OHM J
R9507	24366330	CARBON FILM, 1/6W 33 OHM J
R9607	24366101	CARBON FILM, 1/6W 100 OHM J
R9608	24366681	CARBON FILM, 1/6W 680 OHM J
R9620	24366330	CARBON FILM, 1/6W 33 OHM J
RA01	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA02	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA03	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA04	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA05	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA06	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA07	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA08	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA09	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA12	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA13	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA14	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA15	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA16	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA17	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA18	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA21	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA22	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
RA23	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA26	24011333	CHIP, METAL FILM, 1/20W 33K OHM J

Location No.	Parts No.	Description
RA28	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA30	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA32	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
RA35	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RA36	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA37	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA38	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA39	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA40	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA41	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA42	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
RA43	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA44	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA45	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA46	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA49	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA50	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA51	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA52	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA54	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA55	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA59	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA60	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA71	24366273	CARBON FILM, 1/6W 27K OHM J
RA72	24366153	CARBON FILM, 1/6W 15K OHM J
RA72	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA73	24366822	CARBON FILM, 1/6W 8.2K OHM J
RA73	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RA74	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RA75	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RA76	24366822	CARBON FILM, 1/6W 8.2K OHM J
RA76	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA77	24366153	CARBON FILM, 1/6W 15K OHM J
RA77	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA78	24366273	CARBON FILM, 1/6W 27K OHM J
RA78	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RA79	24366823	CARBON FILM, 1/6W 82K OHM J
RA79	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RA80	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA81	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RA021	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA031	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA141	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA161	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA181	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA221	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RA361	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA401	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RA431	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA703	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA705	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA708	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RB01	24366391	CARBON FILM, 1/6W 390 OHM J
RB03	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RB04	24366473	CARBON FILM, 1/6W 47K OHM J
RB05	24366102	CARBON FILM, 1/6W 1K OHM J
RB05	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB14	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RB15	24366471	CARBON FILM, 1/6W 470 OHM J
RB15	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RB16	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RB17	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RB19	24366470	CARBON FILM, 1/6W 47 OHM J
RB41	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
RB51	24366224	CARBON FILM, 1/6W 220K OHM J

Location No.	Parts No.	Description
RB52	24366123	CARBON FILM, 1/6W 12K OHM J
RB53	24366123	CARBON FILM, 1/6W 12K OHM J
RB54	24366123	CARBON FILM, 1/6W 12K OHM J
RB55	24366224	CARBON FILM, 1/6W 220K OHM J
RB56	24366151	CARBON FILM, 1/6W 150 OHM J
RB57	24366103	CARBON FILM, 1/6W 10K OHM J
RB58	24366103	CARBON FILM, 1/6W 10K OHM J
RB59	24366122	CARBON FILM, 1/6W 1.2K OHM J
RB60	24366224	CARBON FILM, 1/6W 220K OHM J
RB61	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB62	24366272	CARBON FILM, 1/6W 2.7K OHM J
RB62	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB63	24366271	CARBON FILM, 1/6W 270 OHM J
RB64	24366102	CARBON FILM, 1/6W 1K OHM J
RB64	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RB65	24366472	CARBON FILM, 1/6W 4.7K OHM J
RB65	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB66	24366473	CARBON FILM, 1/6W 47K OHM J
RB67	24366221	CARBON FILM, 1/6W 220 OHM J
RB69	24366272	CARBON FILM, 1/6W 2.7K OHM J
RB70	24366331	CARBON FILM, 1/6W 330 OHM J
RB71	24366109	CARBON FILM, 1/6W 1 OHM J
RB72	24366220	CARBON FILM, 1/6W 22 OHM J
RB73	24366560	CARBON FILM, 1/6W 56 OHM J
RB74	24366104	CARBON FILM, 1/6W 100K OHM J
RB81	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
RB82	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB83	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB84	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RB90	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB91	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RB92	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
RB93	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
RB94	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB95	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB96	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RB97	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RB98	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB031	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RB032	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RB033	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB051	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB052	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RB512	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RB551	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB552	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB553	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RC01	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC02	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC03	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RC05	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RC06	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RC07	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RC08	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RC09	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RC10	24872101	CHIP, METAL FILM, 1/16W 100 OHM J
RC11	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RC12	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RD01	24366101	CARBON FILM, 1/6W 100 OHM J
RD02	24366105	CARBON FILM, 1/6W 1M OHM J
RD03	24366101	CARBON FILM, 1/6W 100 OHM J
RD04	24366101	CARBON FILM, 1/6W 100 OHM J
RD05	24366101	CARBON FILM, 1/6W 100 OHM J
RD06	24366472	CARBON FILM, 1/6W 4.7K OHM J
RD07	24366332	CARBON FILM, 1/6W 3.3K OHM J

Location No.	Parts No.	Description
RD09	24366104	CARBON FILM, 1/6W 100K OHM J
RD11	24366104	CARBON FILM, 1/6W 100K OHM J
RD12	24366101	CARBON FILM, 1/6W 100 OHM J
RD13	24366104	CARBON FILM, 1/6W 100K OHM J
RD14	24366221	CARBON FILM, 1/6W 220 OHM J
RD15	24366104	CARBON FILM, 1/6W 100K OHM J
RD16	24366123	CARBON FILM, 1/6W 12K OHM J
RD17	24366101	CARBON FILM, 1/6W 100 OHM J
RD18	24366105	CARBON FILM, 1/6W 1M OHM J
RD19	24366101	CARBON FILM, 1/6W 100 OHM J
RD21	24366332	CARBON FILM, 1/6W 3.3K OHM J
RD41	24366123	CARBON FILM, 1/6W 12K OHM J
RD42	24366333	CARBON FILM, 1/6W 33K OHM J
RD43	24366272	CARBON FILM, 1/6W 2.7K OHM J
RD44	24366123	CARBON FILM, 1/6W 12K OHM J
RD45	24366333	CARBON FILM, 1/6W 33K OHM J
RD46	24366272	CARBON FILM, 1/6W 2.7K OHM J
RD47	24366104	CARBON FILM, 1/6W 100K OHM J
RD48	24366103	CARBON FILM, 1/6W 10K OHM J
RD49	24366562	CARBON FILM, 1/6W 5.6K OHM J
RD60	24366682	CARBON FILM, 1/6W 6.8K OHM J
RD61	24366682	CARBON FILM, 1/6W 6.8K OHM J
RD62	24366109	CARBON FILM, 1/6W 1 OHM J
RD72	24366101	CARBON FILM, 1/6W 100 OHM J
RD73	24366101	CARBON FILM, 1/6W 100 OHM J
RD74	24366101	CARBON FILM, 1/6W 100 OHM J
RD75	24366473	CARBON FILM, 1/6W 47K OHM J
RD76	24366122	CARBON FILM, 1/6W 1.2K OHM J
RD77	24366473	CARBON FILM, 1/6W 47K OHM J
RD78	24366122	CARBON FILM, 1/6W 1.2K OHM J
RD79	24366123	CARBON FILM, 1/6W 12K OHM J
RD81	24366123	CARBON FILM, 1/6W 12K OHM J
RD83	24366103	CARBON FILM, 1/6W 10K OHM J
RD85	24366223	CARBON FILM, 1/6W 22K OHM J
RD86	24366223	CARBON FILM, 1/6W 22K OHM J
RD87	24366223	CARBON FILM, 1/6W 22K OHM J
RD88	24366223	CARBON FILM, 1/6W 22K OHM J
RH002	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RH003	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RH004	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH005	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH006	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH007	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH008	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH009	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH041	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH042	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH043	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH044	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH051	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RH061	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
RH062	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH063	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH064	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH201	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RH202	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RH205	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RH206	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RH207	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RH208	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RH209	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH210	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH211	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RH212	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RH301	24011684	CHIP, METAL FILM, 1/20W 680K OHM J

Location No.	Parts No.	Description
RH302	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH303	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RH304	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RH305	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH306	24011684	CHIP, METAL FILM, 1/20W 680K OHM J
RH307	24011684	CHIP, METAL FILM, 1/20W 680K OHM J
RH308	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH309	24011203	CHIP, METAL FILM, 1/20W 20K OHM J
RH310	24011203	CHIP, METAL FILM, 1/20W 20K OHM J
RH311	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH312	24011684	CHIP, METAL FILM, 1/20W 680K OHM J
RH313	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
RH314	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
RH315	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
RH316	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
RH317	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH318	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH319	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH320	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH321	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH322	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH323	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH324	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH325	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RH326	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RH327	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RH328	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH329	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RH330	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH331	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RH332	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH333	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RH334	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH335	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RH336	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RH337	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RH338	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
RH339	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH340	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH341	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH342	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH343	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH344	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH345	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH346	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH347	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RH401	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH402	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH404	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH405	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH406	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RH407	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH408	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH412	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH413	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RH414	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH415	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH416	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH417	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH420	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RH421	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RH422	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RH425	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RH427	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RH428	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J

Location No.	Parts No.	Description
RH429	24011105	CHIP, METAL FILM, 1/20W 1M OHM J
RH430	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RH431	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH501	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH502	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH503	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH504	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH506	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH507	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH508	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH509	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RH521	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH522	24998103	CHIP, 1/16W 10K OHM
RH523	24998103	CHIP, 1/16W 10K OHM
RH524	24998103	CHIP, 1/16W 10K OHM
RH525	24998103	CHIP, 1/16W 10K OHM
RH526	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH527	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH528	24998103	CHIP, 1/16W 10K OHM
RH529	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH541	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH542	24998103	CHIP, 1/16W 10K OHM
RH543	24998103	CHIP, 1/16W 10K OHM
RH544	24998103	CHIP, 1/16W 10K OHM
RH545	24998103	CHIP, 1/16W 10K OHM
RH546	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH547	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH548	24998103	CHIP, 1/16W 10K OHM
RH549	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH561	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH562	24998103	CHIP, 1/16W 10K OHM
RH563	24998103	CHIP, 1/16W 10K OHM
RH564	24998103	CHIP, 1/16W 10K OHM
RH565	24998103	CHIP, 1/16W 10K OHM
RH566	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH567	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH568	24998103	CHIP, 1/16W 10K OHM
RH569	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH621	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH622	24998103	CHIP, 1/16W 10K OHM
RH623	24998103	CHIP, 1/16W 10K OHM
RH624	24998103	CHIP, 1/16W 10K OHM
RH625	24998103	CHIP, 1/16W 10K OHM
RH626	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH627	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH628	24998103	CHIP, 1/16W 10K OHM
RH629	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH641	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH642	24998103	CHIP, 1/16W 10K OHM
RH643	24998103	CHIP, 1/16W 10K OHM
RH644	24998103	CHIP, 1/16W 10K OHM
RH645	24998103	CHIP, 1/16W 10K OHM
RH646	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH647	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH648	24998103	CHIP, 1/16W 10K OHM
RH649	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH661	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
RH662	24998103	CHIP, 1/16W 10K OHM
RH663	24998103	CHIP, 1/16W 10K OHM
RH664	24998103	CHIP, 1/16W 10K OHM
RH665	24998103	CHIP, 1/16W 10K OHM
RH666	24011822	CHIP, METAL FILM, 1/20W 8.2K OHM J
RH667	24998683	CHIP, METAL FILM, 1/16W 68K OHM D
RH668	24998103	CHIP, 1/16W 10K OHM
RH669	24011911	CHIP, METAL FILM, 1/20W 910 OHM J

Location No.	Parts No.	Description
RR15	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
RR16	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
RR17	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
RR52	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RR53	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RR54	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RR55	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RR56	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RR57	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RR61	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RR61	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RR62	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RR62	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RR63	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RR63	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS02	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RS04	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS06	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS07	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS08	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS09	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS10	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS12	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS21	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS22	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS25	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS26	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS27	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RS28	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RS29	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS30	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS31	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS32	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS33	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS34	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS35	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS36	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS37	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS40	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS42	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS48	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS49	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS51	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS52	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS53	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS54	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS91	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS92	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS93	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS94	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS120	24552821	OXIDE METAL FILM, 1/2W 820 OHM J
RS121	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS122	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS123	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS124	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS125	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS651	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS652	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS665	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS671	24000445	CHIP JUMPER, 1608TYPE
RS672	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RS673	24000445	CHIP JUMPER, 1608TYPE
RS674	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RS675	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS676	24011101	CHIP, METAL FILM, 1/20W 100 OHM J

Location No.	Parts No.	Description
RS683	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS685	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS686	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS687	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV01	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV03	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV04	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV11	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RV12	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RV13	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RV15	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV20	24366750	CARBON FILM, 1/6W 75 OHM J
RV21	24366750	CARBON FILM, 1/6W 75 OHM J
RV22	24366750	CARBON FILM, 1/6W 75 OHM J
RV23	24366332	CARBON FILM, 1/6W 3.3K OHM J
RV24	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV25	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV26	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV31	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV31	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RV32	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV32	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV38	24872184	CHIP, METAL FILM, 1/16W 180K OHM J
RV39	24872334	CHIP, METAL FILM, 1/16W 330K OHM J
RV50	24872472	CHIP, METAL FILM, 1/16W 4.7K OHM J
RV51	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV63	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV64	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV65	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV67	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV70	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV74	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV81	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV83	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RV84	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV85	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
RV86	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV87	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RV89	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
RV91	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV92	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV93	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV94	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV95	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RV97	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RV117	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV118	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV119	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV124	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RV125	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RV126	24011274	CHIP, METAL FILM, 1/20W 270K OHM J
RV127	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RV128	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV140	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV141	24011302	CHIP, METAL FILM, 1/20W 3K OHM J
RV142	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV143	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RV144	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV169	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV178	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RV179	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV180	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV181	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV182	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV183	24011101	CHIP, METAL FILM, 1/20W 100 OHM J

Location No.	Parts No.	Description
RV184	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RV185	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RV186	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RW10	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RW11	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RW12	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RW30	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RW31	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RW32	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RW33	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RW34	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RW40	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RW45	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RX11	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RX12	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RY81	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY82	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J

COILS & TRANSFORMERS

Location No.	Parts No.	Description
L101	23289845	COIL, PEAKING 68.00MMHJ, COLTRF4680AT
L103	23289844	COIL, PEAKING, TRF4470AT
L111	23289845	COIL, PEAKING 68.00MMHJ, COLTRF4680AT
L113	23289842	COIL, PEAKING, TRF4220AT
L115	23103852	COIL, FILTER, TEM2028AH
L121	23238562	COIL, PEAKING, TRF4109AJ
L122	23238562	COIL, PEAKING, TRF4109AJ
L201	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L202	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L203	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L204	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L205	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L206	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L207	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L208	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L209	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L210	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L211	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L212	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L213	23246190	CHIP-INDUCTOR-R39MMHJ, TRF4R39CG
L214	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L215	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L216	23246190	CHIP-INDUCTOR-R39MMHJ, TRF4R39CG
L217	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L218	23246191	CHIP-INDUCTOR-R47MMHJ, TRF4R47CG
L219	23246190	CHIP-INDUCTOR-R39MMHJ, TRF4R39CG
L220	23246195	COIL, CHIP INDUCTOR, TRF41R0CG
L221	23246195	COIL, CHIP INDUCTOR, TRF41R0CG
L222	23246195	COIL, CHIP INDUCTOR, TRF41R0CG
L301	23237975	COIL, PEAKING, TRF4101AC
L302	23248073	COIL, CHOKE, TLN3299D
L303	23248073	COIL, CHOKE, TLN3299D
L304	23103859	COIL, CHOKE, TEM2011
L305	23103775	COIL, FERRITE CHOKE, TEM2014
L401	23289560	COIL, PEAKING, TRF4560AF
L402	23103880	COIL, CHOKE, TEM2011Y

Location No.	Parts No.	Description
⚠ L403	23248248	COIL, CHOKE, TLN3500AH
L404	23248191	COIL, CHOKE, TLN3351AD
L405	23103775	COIL, FERRITE CHOKE, TEM2014
L406	23103775	COIL, FERRITE CHOKE, TEM2014
L410	23289120	COIL, PEAKING, TRF4120AF
⚠ L441	23233995	COIL, LINEARITY, TLN2215AG
L450	23237975	COIL, PEAKING, TRF4101AC
⚠ L462	23231325	COIL, DEFLECTION YOKE, TDY707PS
⚠ L463	23231325	COIL, DEFLECTION YOKE, TDY707PS
⚠ L464	23231325	COIL, DEFLECTION YOKE, TDY707PS
L472	23102499	MAGNET, CPM29.1VM, MAG-1119
L473	23102499	MAGNET, CPM29.1VM, MAG-1119
L474	23102499	MAGNET, CPM29.1VM, MAG-1119
L502	23289120	COIL, PEAKING, TRF4120AF
L503	23289120	COIL, PEAKING, TRF4120AF
L510	23103845	COIL, COMMONMODE, TEM2030AY
L511	23103845	COIL, COMMONMODE, TEM2030AY
L701	23237987	COIL, PEAKING, TRF4100AC
L702	23261974	COIL, FERRITE BEAD, HC5-035
L704	23103859	COIL, CHOKE, TEM2011
L705	23103859	COIL, CHOKE, TEM2011
L762	23103859	COIL, CHOKE, TEM2011
L764	23103859	COIL, CHOKE, TEM2011
L765	23103859	COIL, CHOKE, TEM2011
L766	23261974	COIL, FERRITE BEAD, HC5-035
L769	23237987	COIL, PEAKING, TRF4100AC
L780	23237987	COIL, PEAKING, TRF4100AC
L781	23103859	COIL, CHOKE, TEM2011
L782	23103859	COIL, CHOKE, TEM2011
L783	23261974	COIL, FERRITE BEAD, HC5-035
L801	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L802	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L813	23103880	COIL, CHOKE, TEM2011Y
L821	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L822	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L823	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
L840	23280019	COIL, PEAKING, TRF4330AZ
L851	23103880	COIL, CHOKE, TEM2011Y
L852	23103880	COIL, CHOKE, TEM2011Y
L853	23103880	COIL, CHOKE, TEM2011Y
L854	23103880	COIL, CHOKE, TEM2011Y
L861	23103880	COIL, CHOKE, TEM2011Y
L862	23103880	COIL, CHOKE, TEM2011Y
L881	23103880	COIL, CHOKE, TEM2011Y
L882	23103880	COIL, CHOKE, TEM2011Y
L885	23248073	COIL, CHOKE, TLN3299D
L888	23103880	COIL, CHOKE, TEM2011Y
L889	23103880	COIL, CHOKE, TEM2011Y
L891	23103880	COIL, CHOKE, TEM2011Y
L892	23103880	COIL, CHOKE, TEM2011Y
L893	23103880	COIL, CHOKE, TEM2011Y
L894	23103880	COIL, CHOKE, TEM2011Y
L895	23248247	COIL, CHOKE, TLN3499AH
L896	23248235	COIL, CHOKE 12X18H 22MMH 4.2A, TLN3462AF
L897	23248087	COIL, CHOKE, TLN3312D
L898	23248087	COIL, CHOKE, TLN3312D
L902	23289159	COIL, PEAKING 1.5MMH J 0405, TRF41R5AF
L904	23289120	COIL, PEAKING, TRF4120AF
L905	23289689	COIL, PEAKING, TRF46R8AF
L911	23289100	COIL, PEAKING, TRF4100AF
L913	23289159	COIL, PEAKING 1.5MMH J 0405, TRF41R5AF
L915	23289689	COIL, PEAKING, TRF46R8AF
L916	23289120	COIL, PEAKING, TRF4120AF
L923	23289159	COIL, PEAKING 1.5MMH J 0405, TRF41R5AF
L924	23289120	COIL, PEAKING, TRF4120AF
L925	23289689	COIL, PEAKING, TRF46R8AF
L961	23289100	COIL, PEAKING, TRF4100AF
L7701	23103859	COIL, CHOKE, TEM2011
L7702	23103859	COIL, CHOKE, TEM2011
L7703	23103859	COIL, CHOKE, TEM2011
L7704	23103859	COIL, CHOKE, TEM2011
L7705	23103859	COIL, CHOKE, TEM2011
L7706	23103859	COIL, CHOKE, TEM2011
L7708	23103859	COIL, CHOKE, TEM2011
L7709	23103859	COIL, CHOKE, TEM2011
L7710	23248195	COIL, CHOKE, TLN3441AT
L7711	23248195	COIL, CHOKE, TLN3441AT
L7712	23248031	COIL, CHOKE, TLN3274D
L7713	23248031	COIL, CHOKE, TLN3274D
LB51	23237987	COIL, PEAKING, TRF4100AC
LB52	23237987	COIL, PEAKING, TRF4100AC
LC01	23103152	FILTER, CHIP BEAD 1.5A 600OHM BLM31PG601SN1, TEM2133AM
LH001	23103864	COIL, FILTER, TEM2103T
LH002	23103864	COIL, FILTER, TEM2103T
LH003	23103859	COIL, CHOKE, TEM2011
LH004	23103859	COIL, CHOKE, TEM2011
LH005	23103859	COIL, CHOKE, TEM2011
LH009	23103795	IMPEDER, MMZ2012S301A
LH010	23103795	IMPEDER, MMZ2012S301A
LH012	23103859	COIL, CHOKE, TEM2011
LH061	23103864	COIL, FILTER, TEM2103T
LH062	23103864	COIL, FILTER, TEM2103T
LH063	23103864	COIL, FILTER, TEM2103T
LH064	23103864	COIL, FILTER, TEM2103T
LH065	23103864	COIL, FILTER, TEM2103T
LH066	23103864	COIL, FILTER, TEM2103T
LH067	23103864	COIL, FILTER, TEM2103T
LH122	23103864	COIL, FILTER, TEM2103T
LH124	23103864	COIL, FILTER, TEM2103T
LH125	23103864	COIL, FILTER, TEM2103T
LH126	23103864	COIL, FILTER, TEM2103T
LH301	23103859	COIL, CHOKE, TEM2011
LH302	23103859	COIL, CHOKE, TEM2011
LH401	23245830	COIL, CHIP, TRF4100CB
LH402	23103864	COIL, FILTER, TEM2103T
LH403	23103864	COIL, FILTER, TEM2103T
LH404	23103864	COIL, FILTER, TEM2103T
LH405	23103864	COIL, FILTER, TEM2103T
LH411	23103864	COIL, FILTER, TEM2103T
LH521	23289102	COIL. PEAKING, TRF4102AF
LH522	23289471	COIL, PEAKING, TRF4471AF
LH541	23289102	COIL. PEAKING, TRF4102AF
LH542	23289471	COIL, PEAKING, TRF4471AF
LH561	23289102	COIL. PEAKING, TRF4102AF
LH562	23289471	COIL, PEAKING, TRF4471AF
LH621	23289102	COIL. PEAKING, TRF4102AF
LH622	23289471	COIL, PEAKING, TRF4471AF
LH641	23289102	COIL. PEAKING, TRF4102AF
LH642	23289471	COIL, PEAKING, TRF4471AF
LH661	23289102	COIL. PEAKING, TRF4102AF
LH662	23289471	COIL, PEAKING, TRF4471AF
LH800	23103795	IMPEDER, MMZ2012S301A
LS90	23289100	COIL, PEAKING, TRF4100AF

Location No.	Parts No.	Description
LV05	23289560	COIL, PEAKING, TRF4560AF
LV06	23289560	COIL, PEAKING, TRF4560AF
LV10	23289100	COIL, PEAKING, TRF4100AF
LV13	23289100	COIL, PEAKING, TRF4100AF
LV14	23289100	COIL, PEAKING, TRF4100AF
LV20	23238705	COIL, PEAKING, TRF4560AJ
LV81	23289100	COIL, PEAKING, TRF4100AF
LY22	23103824	COIL, FILTER, TEM2028K
LY80	23289100	COIL, PEAKING, TRF4100AF
T400	23224364	TRANSFORMER, FOCUS, TLN2168AH
T401	23224371	TRANSFORMER, HORIZ DRIVE, TLN1080AH
⚠ T461A	23192961	ANODE CAP ASSY, TCC5605AU
T802	23211759	COIL, LF LH35V 21990A
T840	23217431	TRANSFORMER, CONVERTER, TPW3425AH
T862	23217560	CONV EER40 50H82, TPW3500AS
SEMICONDUCTORS		
Q151	23205123	TRANSISTOR, 2SA933ASQ
Q152	23314204	TRANSISTOR, 2SC2412K,Q
Q171	23205057	TRANSISTOR, KTC3875Y
Q172	23205057	TRANSISTOR, KTC3875Y
Q201	23009234	IC,TI TFP501
Q201	23205057	TRANSISTOR, KTC3875Y
Q202	23009233	IC, TI THS8200
Q203	23009238	IC, TMP87C809M-xxxx
Q204	23009235	IC,EPM3032A
Q205	23205151	TRANSISTOR, FET, BSN20
Q206	23205151	TRANSISTOR, FET, BSN20
Q207	23314163	TRANSISTOR, 2SA1162-Y
Q208	23314163	TRANSISTOR, 2SA1162-Y
Q209	23314163	TRANSISTOR, 2SA1162-Y
Q210	23314204	TRANSISTOR, 2SC2412K,Q
Q211	23205151	TRANSISTOR, FET, BSN20
Q212	70114402	TRANSISTOR, 2SC3437-Y
Q213	23314204	TRANSISTOR, 2SC2412K,Q
Q221	23114756	TRANSISTOR, 2SC2482
Q301	23319787	IC, LA7833S
Q301B	70391355	SCREW, 3X8MM
Q302	23205054	TRANSISTOR, KTA1504Y
Q305	23904896	IC, JLC1562BF
Q321	70119059	IC, OP AMP, TA75902P(J)
Q322	23905266	IC, TA8859CP
Q323	23314965	TRANSISTOR, KTC3198 Y
Q324	70119059	IC, OP AMP, TA75902P(J)
Q325	23314965	TRANSISTOR, KTC3198 Y
Q326	23314962	TRANSISTOR, KTA1266 Y
Q327	23314965	TRANSISTOR, KTC3198 Y
Q328	23114462	TRANSISTOR, RN1202
Q329	23114461	TRANSISTOR, RN1203
Q400	23205079	TRANSISTOR, 2SC4686A
Q401	23205166	TRANSISTOR, FET, 2SK2962
Q402	23314962	TRANSISTOR, KTA1266 Y
Q403	23314965	TRANSISTOR, KTC3198 Y
Q404	23205149	TRANSISTOR, 2SC5859(FA)
Q404B	72471082	SCREW, 3X10MM
Q404D	23850638	INSULATOR, TRANSISTOR, AC263(NO SERVICE PART)
Q405	23114437	TRANSISTOR, 2SC752GTM-Y
Q406	70128158	IC, BA10393
Q407	23319808	IC, M5218AP
Q408	23205031	TRANSISTOR, FET, 2SK2920
Q409	23314965	TRANSISTOR, KTC3198 Y
Q410	23319203	IC, MC7812CT
Q411	23114756	TRANSISTOR, 2SC2482
Q420	23316816	IC, LA7860

Location No.	Parts No.	Description
Q421	23114437	TRANSISTOR, 2SC752GTM-Y
Q431	70114402	TRANSISTOR, 2SC3437-Y
Q432	70114402	TRANSISTOR, 2SC3437-Y
Q434	70114402	TRANSISTOR, 2SC3437-Y
Q435	70114402	TRANSISTOR, 2SC3437-Y
Q436	23205057	TRANSISTOR, KTC3875Y
Q437	23000370	IC, TA1318N
Q510	23009251	IC, TA1360N(MOD)
Q520	23205123	TRANSISTOR, 2SA933ASQ
Q521	23205123	TRANSISTOR, 2SA933ASQ
Q522	23205123	TRANSISTOR, 2SA933ASQ
Q523	23205057	TRANSISTOR, KTC3875Y
Q524	23114502	TRANSISTOR, RN1401
Q525	23114502	TRANSISTOR, RN1401
Q526	23114502	TRANSISTOR, RN1401
Q527	23205054	TRANSISTOR, KTA1504Y
Q528	23205054	TRANSISTOR, KTA1504Y
Q529	23205054	TRANSISTOR, KTA1504Y
Q601	23000269	IC, TA8216H
Q601B	70391356	SCREW, BITTB3X10 SZN
Q612	23205054	TRANSISTOR, KTA1504Y
Q661	70114396	TRANSISTOR, 2SC3326B
Q662	70114396	TRANSISTOR, 2SC3326B
Q663	23906597	IC, BA4558F
Q664	23114493	TRANSISTOR, RN2404
Q681	70114396	TRANSISTOR, 2SC3326B
Q682	70114396	TRANSISTOR, 2SC3326B
Q683	23205057	TRANSISTOR, KTC3875Y
Q706	23114528	TRANSISTOR, 2SC1740S
Q707	23114437	TRANSISTOR, 2SC752GTM-Y
Q709	23114528	TRANSISTOR, 2SC1740S
Q710	23205123	TRANSISTOR, 2SA933ASQ
Q711	23314909	TRANSISTOR, 2SA1837
Q711B	23712306	SCREW, PP3X.5X6SZN
Q712	23314912	TRANSISTOR, 2SC4793
Q712B	23712306	SCREW, PP3X.5X6SZN
Q719	23114528	TRANSISTOR, 2SC1740S
Q720	23114528	TRANSISTOR, 2SC1740S
Q751	23905094	IC, STK392-110
Q752	23905094	IC, STK392-110
Q755	23906689	IC, PQ05RR11
Q760	23205123	TRANSISTOR, 2SA933ASQ
Q761	23314909	TRANSISTOR, 2SA1837
Q761B	23712306	SCREW, PP3X.5X6SZN
Q764	23319720	IC, TC74HC14AF
Q765	23205057	TRANSISTOR, KTC3875Y
Q766	23205057	TRANSISTOR, KTC3875Y
Q767	23904442	IC, TC74HC4066AF
Q769	23114528	TRANSISTOR, 2SC1740S
Q771	23314912	TRANSISTOR, 2SC4793
Q771	23319267	IC, AN79M12F
Q771B	23712306	SCREW, PP3X.5X6SZN
Q772	23205054	TRANSISTOR, KTA1504Y
Q776	23205057	TRANSISTOR, KTC3875Y
Q777	23205054	TRANSISTOR, KTA1504Y
Q778	23205057	TRANSISTOR, KTC3875Y
Q779	23114528	TRANSISTOR, 2SC1740S
Q779	23205057	TRANSISTOR, KTC3875Y
Q780	23205054	TRANSISTOR, KTA1504Y
Q781	23114528	TRANSISTOR, 2SC1740S
Q781	23205057	TRANSISTOR, KTC3875Y
Q782	23205123	TRANSISTOR, 2SA933ASQ
Q782	23318840	IC, AN79M05F
Q783	23114528	TRANSISTOR, 2SC1740S
Q783	23205037	TRANSISTOR, 2SJ512, -250V,-5A,30W

Location No.	Parts No.	Description
Q784	23314909	TRANSISTOR, 2SA1837
Q784B	23712306	SCREW, PP3X.5X6SZN
Q785	23314912	TRANSISTOR, 2SC4793
Q785B	23712306	SCREW, PP3X.5X6SZN
Q792	23906429	IC, TC74HC123AF
Q793	23205031	TRANSISTOR, FET, 2SK2920
Q796	23205057	TRANSISTOR, KTC3875Y
Q797	23906164	IC, TA75S393F
Q798	23318537	IC, TC4S66F
Q799	23318537	IC, TC4S66F
Q801	23009236	IC,TI TPS76918
Q801	23135013	IC, STR-Z4317
Q820	23906484	IC, BA033T
Q822	70129444	IC, PST994D
Q830	23000804	IC, +9V 2% REG. TO220, SI-3090J(LF1
Q831	23319941	IC, SI-3050C
Q832	23000805	IC, SI-3033CA(LF1101)
Q840	23906133	IC, MIP280
Q841	23000823	IC, PHOTO COUPLER, TLP421F(GR)
Q842	23000823	IC, PHOTO COUPLER, TLP421F(GR)
Q843	23314965	TRANSISTOR, KTC3198 Y
Q862	23000823	IC, PHOTO COUPLER, TLP421F(GR)
Q881	23319693	IC, SE116N, LF4
Q901	23205159	TRANSISTOR, NPN VCBO=300V
Q902	23205165	TRANSISTOR, NPN VCBO=30V
Q904	23205158	TRANSISTOR, NPN VCBO=300V
Q905	23205156	TRANSISTOR, PNP VCBO=-300
Q911	23205159	TRANSISTOR, NPN VCBO=300V
Q912	23205165	TRANSISTOR, NPN VCBO=30V
Q913	23314962	TRANSISTOR, KTA1266 Y
Q914	23205158	TRANSISTOR, NPN VCBO=300V
Q915	23205156	TRANSISTOR, PNP VCBO=-300
Q921	23205159	TRANSISTOR, NPN VCBO=300V
Q922	23205165	TRANSISTOR, NPN VCBO=30V
Q924	23205158	TRANSISTOR, NPN VCBO=300V
Q925	23205156	TRANSISTOR, PNP VCBO=-300
Q961	23314965	TRANSISTOR, KTC3198 Y
Q962	23314962	TRANSISTOR, KTA1266 Y
Q973	23314962	TRANSISTOR, KTA1266 Y
QA01	23009282	IC, MCU 1CHIP 16BIT 4M 64, MN102H85KFF
QA02	23906642	IC, AT24C64-10PC
QA70	23319935	IC, MM1096BS
QA71	23205057	TRANSISTOR, KTC3875Y
QA72	23205057	TRANSISTOR, KTC3875Y
QA80	23906295	IC, UPC29M33HB
QA81	70200563	IC, RESET VS=2.9V, PST9129
QB01	23114528	TRANSISTOR, 2SC1740S
QB03	23114498	TRANSISTOR, RN1405
QB05	23205057	TRANSISTOR, KTC3875Y
QB14	23205057	TRANSISTOR, KTC3875Y
QB15	23205057	TRANSISTOR, KTC3875Y
QB30	23314965	TRANSISTOR, KTC3198 Y
QB51	23319808	IC, M5218AP
QB52	23314965	TRANSISTOR, KTC3198 Y
QB53	23314962	TRANSISTOR, KTA1266 Y
QB54	23314962	TRANSISTOR, KTA1266 Y
QB55	23205057	TRANSISTOR, KTC3875Y
QB55	23314965	TRANSISTOR, KTC3198 Y
QB61	70114402	TRANSISTOR, 2SC3437-Y
QB81	70114396	TRANSISTOR, 2SC3326B
QB82	70114396	TRANSISTOR, 2SC3326B
QB83	23205054	TRANSISTOR, KTA1504Y
QB84	23205057	TRANSISTOR, KTC3875Y
QB85	23205054	TRANSISTOR, KTA1504Y
QB86	23205054	TRANSISTOR, KTA1504Y

Location No.	Parts No.	Description
QB87	23205054	TRANSISTOR, KTA1504Y
QB88	23205054	TRANSISTOR, KTA1504Y
QC01	23000040	IC, 4K BIT CMOS EEPROM, AT24C04N10SC
QC02	23205151	TRANSISTOR, FET, BSN20
QC03	23205151	TRANSISTOR, FET, BSN20
QC04	23000040	IC, 4K BIT CMOS EEPROM, AT24C04N10SC
QC05	23314204	TRANSISTOR, 2SC2412K,Q
QD01	23009142	IC, NJM1136D
QD41	23000725	IC, NJM2700L
QD42	23314085	TRANSISTOR, FET, 2SK372 V
QD44	23114460	TRANSISTOR, RN1204
QD45	23114460	TRANSISTOR, RN1204
QD81	23114466	TRANSISTOR, RN2204
QD82	23114623	TRANSISTOR, 2SC2878-A(TEM
QD83	23114623	TRANSISTOR, 2SC2878-A(TEM
QH001	23000380	IC, TC190C060AF-301(Z)
QH004	23319595	IC, TC74HC244AF
QH005	23905013	IC, TLC2932IPW
QH006	23906908	IC, MC33078D
QH173	23905666	IC, AT24C1610PC
QH301	23358557	OPT DEVICE, AM. PHOTOSENSOR, AM-30-24CA
QH301	23358557	OPT DEVICE, AM. PHOTOSENSOR, AM-30-24CA
QH301	23358557	OPT DEVICE, AM. PHOTOSENSOR, AM-30-24CA
QH301	23358557	OPT DEVICE, AM. PHOTOSENSOR, AM-30-24CA
QH305	23906585	IC, QUAD OP-AMP DMP14 14P, NJM2058M
QH306	23906585	IC, QUAD OP-AMP DMP14 14P, NJM2058M
QH307	23906585	IC, QUAD OP-AMP DMP14 14P, NJM2058M
QH308	23906429	IC, TC74HC123AF
QH309	23906429	IC, TC74HC123AF
QH401	23009185	IC, MCU 1CHIP 8BIT 8M 42P, 8700CPN-3R14
QH402	70119743	IC, PST523D
QH404	23318977	IC, MC14052BF
QH405	23319595	IC, TC74HC244AF
QH406	23205054	TRANSISTOR, KTA1504Y
QH501	23009177	IC, D/A CONVERTER 6CH IN, CD0031AMT
QH520	23906909	IC, MC33079D
QH540	23906909	IC, MC33079D
QH560	23906909	IC, MC33079D
QR14	23205054	TRANSISTOR, KTA1504Y
QR15	23205054	TRANSISTOR, KTA1504Y
QR16	23205054	TRANSISTOR, KTA1504Y
QS01	70114396	TRANSISTOR, 2SC3326B
QS107	23904896	IC, JLC1562BF
QS108	23205057	TRANSISTOR, KTC3875Y
QS11	70114396	TRANSISTOR, 2SC3326B
QS12	23114493	TRANSISTOR, RN2404
QS120	23906597	IC, BA4558F
QS13	23314204	TRANSISTOR, 2SC2412K,Q
QS14	23314204	TRANSISTOR, 2SC2412K,Q
QS90	23000529	IC, SW 2IN 1OUT 3CIRCUIT 0 CLP, MM1231XD
QV01	23905539	IC, TA8851CN
QV10	23314204	TRANSISTOR, 2SC2412K,Q
QV20	23114499	TRANSISTOR, RN1404
QV21	23314204	TRANSISTOR, 2SC2412K,Q
QV22	23205045	TRANSISTOR, 2SA1037AKQ
QV23	23205045	TRANSISTOR, 2SA1037AKQ
QV28	23114500	TRANSISTOR, RN1403
QV30	23905590	IC, M52055FP
QV31	23205057	TRANSISTOR, KTC3875Y
QV37	23205054	TRANSISTOR, KTA1504Y
QV38	23205054	TRANSISTOR, KTA1504Y

Location No.	Parts No.	Description
QV39	23205054	TRANSISTOR, KTA1504Y
QV48	23114433	TRANSISTOR, 2SC1815-Y
QV49	23114433	TRANSISTOR, 2SC1815-Y
QV61	23205054	TRANSISTOR, KTA1504Y
QV81	23318438	IC, M52055P
QV83	23205057	TRANSISTOR, KTC3875Y
QV91	23205057	TRANSISTOR, KTC3875Y
QW04	23205057	TRANSISTOR, KTC3875Y
QW05	23205057	TRANSISTOR, KTC3875Y
QW08	23205057	TRANSISTOR, KTC3875Y
QW10	23205057	TRANSISTOR, KTC3875Y
QW11	23205057	TRANSISTOR, KTC3875Y
QW17	23114502	TRANSISTOR, RN1401
QY260	23314204	TRANSISTOR, 2SC2412K,Q
D101	23316755	DIODE, ZENER, MTZJ33C
D201	23118041	DIODE, MA111
D202	23118041	DIODE, MA111
D203	23118041	DIODE, MA111
D204	23118041	DIODE, MA111
D205	23316573	DIODE, ZENER, MA8062-L
D206	23316573	DIODE, ZENER, MA8062-L
D215	23118041	DIODE, MA111
D216	23118041	DIODE, MA111
D217	23118041	DIODE, MA111
D218	23118041	DIODE, MA111
D219	23118041	DIODE, MA111
D220	23118041	DIODE, MA111
D260	23118094	DIODE, EU2A
D301	23118094	DIODE, EU2A
D302	23316794	DIODE, SC570A
D303	23118822	DIODE, ERB12-02
D304	23118822	DIODE, ERB12-02
D305	23118041	DIODE, MA111
D311	23316682	DIODE, ZENER, MTZJ7.5C
D312	23316732	DIODE, ZENER, MTZJ18C
D313	23118859	DIODE, 1SS133
D314	23118859	DIODE, 1SS133
D315	23118859	DIODE, 1SS133
D401	23118094	DIODE, EU2A
D402	23118094	DIODE, EU2A
D403	23316731	DIODE, ZENER, MTZJ18B
D404	23316254	DIODE, ERC06-15
D405	23118094	DIODE, EU2A
D406	23118094	DIODE, EU2A
D407	23316731	DIODE, ZENER, MTZJ18B
D408	23115910	DIODE, S5295G
D409	23118094	DIODE, EU2A
D411	23118094	DIODE, EU2A
D413	23118707	DIODE, RP-1H
D414	23118707	DIODE, RP-1H
D415	23118859	DIODE, 1SS133
D416	23118094	DIODE, EU2A
D416	23118041	DIODE, MA111
D417	23316591	DIODE, ZENER, MA8100-M
D418	23316591	DIODE, ZENER, MA8100-M
D419	23316571	DIODE, ZENER CHIP VZ5.48-5.76V MA8056-M
D420	23118041	DIODE, MA111
D461	23224366	DIODE, FMQ-3GU
D461B	70391355	SCREW, 3X8MM
⚠ D482	23115774	DIODE, ZENER, RD6.2E(FA-1)
D520	23316647	DIODE, ZENER, MTZJ2.0B
D521	23118041	DIODE, MA111
D522	23118041	DIODE, MA111
D523	23118041	DIODE, MA111
D530	23316586	DIODE, ZENER, MA8082-H

Location No.	Parts No.	Description
D531	23316584	DIODE, ZENER CHIP VZ7.77-8.17V MA8082-L
D532	23118822	DIODE, ERB12-02
D533	23316586	DIODE, ZENER, MA8082-H
D534	23316792	DIODE, SC215
D535	23316591	DIODE, ZENER, MA8100-M
D601	23118041	DIODE, MA111
D602	23118041	DIODE, MA111
D603	23118041	DIODE, MA111
D604	23118041	DIODE, MA111
D607	23316616	DIODE, ZENER CHIP 21.45-22.55V MA8220-M
D608	23316616	DIODE, ZENER CHIP 21.45-22.55V MA8220-M
D611	23118041	DIODE, MA111
D612	23118041	DIODE, MA111
D613	23118041	DIODE, MA111
D614	23118041	DIODE, MA111
D615	23118041	DIODE, MA111
D616	23118041	DIODE, MA111
D661	23316580	DIODE, ZENER CHIP VZ7.29-7.67V MA8075-M
D704	23118859	DIODE, 1SS133
D705	23118859	DIODE, 1SS133
D715	23118859	DIODE, 1SS133
D721	23118859	DIODE, 1SS133
D761	23118859	DIODE, 1SS133
D762	23118859	DIODE, 1SS133
D763	23118859	DIODE, 1SS133
D764	23118859	DIODE, 1SS133
D781	23118859	DIODE, 1SS133
D782	23118859	DIODE, 1SS133
D783	23118859	DIODE, 1SS133
D784	23118859	DIODE, 1SS133
D801	23316784	DIODE, RBV1506, LF-A
D820	23118041	DIODE, MA111
D821	23118094	DIODE, EU2A
D840	23357207	DIODE, LN1WBA60
D841	23118528	DIODE, ZENER, RD5.6ESA B3
D842	23118536	DIODE, ZENER, RD4.7ES B1
D843	23118094	DIODE, EU2A
D845	23118859	DIODE, 1SS133
D846	23118633	DIODE, ZENER, RD3.0ES B2
D847	23118633	DIODE, ZENER, RD3.0ES B2
D848	23118859	DIODE, 1SS133
D851	23357215	DIODE, D4SBS6
D852	23316714	DIODE, RL2Z
D853	23316714	DIODE, RL2Z
D854	23316399	DIODE, EL1Z
D855	23316399	DIODE, EL1Z
D862	23118094	DIODE, EU2A
D864	23118094	DIODE, EU2A
D873	23118622	DIODE, ZENER, RD10ES B2
D875	23118623	DIODE, ZENER, RD10ES B1
D876	23118603	DIODE, ZENER VZ33.40-35.13 DO-34RD36ESA B3
D879	23118615	DIODE, ZENER, RD27ES B3
D881	23118859	DIODE, 1SS133
D882	23357012	DIODE, 1SS244
D883	23118859	DIODE, 1SS133
D884	23357217	DIODE, D4SBL40
D885	23357216	DIODE, D4SBL20U
D890	23316661	DIODE, ZENER, MTZJ3.9B
D891	23357214	DIODE, D4SBS4
D892	23316768	DIODE, FMB-26L
D899	24019485	VARISTOR, TNR10V431K
D901	23118859	DIODE, 1SS133
D904	23118859	DIODE, 1SS133
D905	23118859	DIODE, 1SS133

Location No.	Parts No.	Description
D906	23357012	DIODE, 1SS244
D907	23357012	DIODE, 1SS244
D908	23357012	DIODE, 1SS244
D909	23357012	DIODE, 1SS244
D912	23118859	DIODE, 1SS133
D913	23115337	DIODE, 1S1834
D914	23118859	DIODE, 1SS133
D915	23118859	DIODE, 1SS133
D916	23357012	DIODE, 1SS244
D917	23357012	DIODE, 1SS244
D918	23357012	DIODE, 1SS244
D919	23357012	DIODE, 1SS244
D921	23118859	DIODE, 1SS133
D924	23118859	DIODE, 1SS133
D925	23118859	DIODE, 1SS133
D926	23357012	DIODE, 1SS244
D927	23357012	DIODE, 1SS244
D928	23357012	DIODE, 1SS244
D929	23357012	DIODE, 1SS244
D936	23115337	DIODE, 1S1834
D967	23115337	DIODE, 1S1834
D7705	23118041	DIODE, MA111
D7706	23118041	DIODE, MA111
D7707	23118041	DIODE, MA111
D7708	23118041	DIODE, MA111
D7709	23118538	DIODE, ZENER, RD6.2ESA B2
D7715	23118041	DIODE, MA111
D7716	23118041	DIODE, MA111
D7717	23118538	DIODE, ZENER, RD6.2ESA B2
D7718	23118538	DIODE, ZENER, RD6.2ESA B2
D7719	23118538	DIODE, ZENER, RD6.2ESA B2
D7733	23118275	DIODE, ZENER, RD18MB2
D7734	23118275	DIODE, ZENER, RD18MB2
D7736	23118538	DIODE, ZENER, RD6.2ESA B2
D7738	23118041	DIODE, MA111
D7739	23118041	DIODE, MA111
D7740	23118041	DIODE, MA111
D7741	23118041	DIODE, MA111
D7742	23118041	DIODE, MA111
D7743	23118041	DIODE, MA111
D7745	23118041	DIODE, MA111
D7746	23118041	DIODE, MA111
D7747	23118041	DIODE, MA111
D7748	23118041	DIODE, MA111
D7749	23118041	DIODE, MA111
D7760	23118041	DIODE, MA111
D7806	23118041	DIODE, MA111
D7807	23316402	DIODE, RL4Z
D7808	23316766	DIODE, RU2YX
DA02	23316574	DIODE, ZENER CHIP VZ6.05-6.36V MA8062-M
DA23	23118041	DIODE, MA111
DA43	23118041	DIODE, MA111
DA44	23118041	DIODE, MA111
DA45	23118041	DIODE, MA111
DA46	23118041	DIODE, MA111
DA70	23118041	DIODE, MA111
DB01	23358564	DIODE, LED, SLR-56VC3FPQ
DB03	23358522	DIODE, LED, SIR-56SB3F
DB30	23118041	DIODE, MA111
DB31	23118041	DIODE, MA111
DB51	23358573	PHOTO DIODE, PIN 940NM
DB52	23118859	DIODE, 1SS133
DB53	23118859	DIODE, 1SS133
DB54	23118859	DIODE, 1SS133
DB61	23118041	DIODE, MA111

Location No.	Parts No.	Description
DC01	23118041	DIODE, MA111
DC02	23118041	DIODE, MA111
DC03	23118041	DIODE, MA111
DC04	23118041	DIODE, MA111
DD81	23118859	DIODE, 1SS133
DD82	23118859	DIODE, 1SS133
DD83	23118859	DIODE, 1SS133
DH001	23316675	DIODE, ZENER, MTZJ6.2B
DH002	23316675	DIODE, ZENER, MTZJ6.2B
DH003	23316675	DIODE, ZENER, MTZJ6.2B
DH301	23316672	DIODE, ZENER, MTZJ5.6B
DH301	23316672	DIODE, ZENER, MTZJ5.6B
DH301	23316672	DIODE, ZENER, MTZJ5.6B
DH301	23316672	DIODE, ZENER, MTZJ5.6B
DH301	23316672	DIODE, ZENER, MTZJ5.6B
DH302	23316672	DIODE, ZENER, MTZJ5.6B
DH303	23316672	DIODE, ZENER, MTZJ5.6B
DH304	23316672	DIODE, ZENER, MTZJ5.6B
DH305	23316672	DIODE, ZENER, MTZJ5.6B
DH306	23316672	DIODE, ZENER, MTZJ5.6B
DH307	23316672	DIODE, ZENER, MTZJ5.6B
DH308	23316672	DIODE, ZENER, MTZJ5.6B
DH309	23118859	DIODE, 1SS133
DH310	23118859	DIODE, 1SS133
DH311	23118859	DIODE, 1SS133
DH312	23118859	DIODE, 1SS133
DH313	23316666	DIODE, ZENER, MTZJ4.7B
DH314	23316666	DIODE, ZENER, MTZJ4.7B
DH315	23316666	DIODE, ZENER, MTZJ4.7B
DH316	23316666	DIODE, ZENER, MTZJ4.7B
DH401	23316574	DIODE, ZENER CHIP VZ6.05-6.36V MA8062-M
DR10	23118041	DIODE, MA111
DR11	23118041	DIODE, MA111
DR12	23118041	DIODE, MA111
DR13	23118041	DIODE, MA111
DR14	23118041	DIODE, MA111
DR15	23118041	DIODE, MA111
DS90	23316596	DIODE, ZENER 11.40-11.96V
DS120	23316740	DIODE, ZENER VZ21.52-22.63 DO34 MTZ J 22D
DV01	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV02	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV03	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV07	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV08	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV09	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV11	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV12	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV13	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV17	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV18	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV25	23118041	DIODE, MA111
DV30	23316792	DIODE, SC215
DV31	23316672	DIODE, ZENER, MTZJ5.6B
DV39	23358543	PHOTO SENSOR, IF=10MA 650NM, S7565
DV161	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV161	23316591	DIODE, ZENER, MA8100-M
DV162	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV162	23316591	DIODE, ZENER, MA8100-M
DV163	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV163	23316591	DIODE, ZENER, MA8100-M
DV164	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV164	23316591	DIODE, ZENER, MA8100-M
DV165	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV165	23316591	DIODE, ZENER, MA8100-M

Location No.	Parts No.	Description
DV166	23316587	DIODE, ZENER CHIP VZ8.58-9.02V MA8091-L
DV166	23316591	DIODE, ZENER, MA8100-M
MISCELLANEOUS		
B110	23929684	BACK TERM BOARD 65HDX82
B224	23035412	SCREW, BTB4X12SZN
B230	23037312	SCREW, BTBW3X12SZN
B233	23035412	SCREW, BTB4X12SZN
B234	23035412	SCREW, BTB4X12SZN
B235	23035310	SCREW, BTB3X10SZN
B236	23035412	SCREW, BTB4X12SZN
BB10	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB11	23713013	BASE SOCKET 16P 1.5
BB20	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB21	23713013	BASE SOCKET 16P 1.5
BB30	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
BB31	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
BB300	23368627	CONNECTOR, BRIDGE B-B 8P 2.5JST 08TM-2.5FJ-E
E918	23737007	BOLT, BOLT ASSY 50A60
E948	23737007	BOLT, BOLT ASSY 50A60
E978	23737007	BOLT, BOLT ASSY 50A60
F470	23144624	FUSE, AXIAL, 125V 2.0A
F801	23144481	FUSE, 125V 7.0A-T U/C MINI
F801A	23165433	FUSE HOLDER, 5.2 SOC
F840	23144581	FUSE, AXIAL, 125V 200MA
F850	23144627	FUSE, AXIAL, 125V 5.0A
F851	23144627	FUSE, AXIAL, 125V 5.0A
F852	23144624	FUSE, AXIAL, 125V 2.0A
F853	23144622	FUSE, AXIAL, 125V 1.25A
F860	23144456	FUSE, AXIAL, 125V 5.0A
F889	23144626	FUSE, AXIAL, 125V 4.0A
F890	23144625	FUSE, AXIAL, 125V 3.15A
F891	23144627	FUSE, AXIAL, 125V 5.0A
G101	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
G102	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
GCD86	24797100	ELECTROLYTIC, 50V 10UF M
GCD88	24797100	ELECTROLYTIC, 50V 10UF M
GCD90	24797100	ELECTROLYTIC, 50V 10UF M
GCD91	24797100	ELECTROLYTIC, 50V 10UF M
GJ01	24000445	CHIP JUMPER, 1608TYPE
GJ01	24000445	CHIP JUMPER, 1608TYPE
GJ02	24000445	CHIP JUMPER, 1608TYPE
GJ03	24000445	CHIP JUMPER, 1608TYPE
GJ05	24000445	CHIP JUMPER, 1608TYPE
GJ05	24000445	CHIP JUMPER, 1608TYPE
GJ06	24000445	CHIP JUMPER, 1608TYPE
GJ07	24000824	CHIP JUMPER, 2125TYPE
GJ11	24000445	CHIP JUMPER, 1608TYPE
GJ13	24000445	CHIP JUMPER, 1608TYPE
GJ14	24000445	CHIP JUMPER, 1608TYPE
GJ14	24000445	CHIP JUMPER, 1608TYPE
GJ14	24000445	CHIP JUMPER, 1608TYPE
GJ15	24000445	CHIP JUMPER, 1608TYPE
GJ15	24000445	CHIP JUMPER, 1608TYPE
GJ15	24000445	CHIP JUMPER, 1608TYPE
GJ16	24000445	CHIP JUMPER, 1608TYPE
GJ16	24000445	CHIP JUMPER, 1608TYPE
GJ17	24000445	CHIP JUMPER, 1608TYPE
GJ18	24000445	CHIP JUMPER, 1608TYPE
GJ19	24000445	CHIP JUMPER, 1608TYPE
GJ20	24000445	CHIP JUMPER, 1608TYPE
GJ20	24000445	CHIP JUMPER, 1608TYPE
GJ21	24000445	CHIP JUMPER, 1608TYPE
GJ30	24000445	CHIP JUMPER, 1608TYPE

Location No.	Parts No.	Description
GJ33	24000445	CHIP JUMPER, 1608TYPE
GJ40	24000445	CHIP JUMPER, 1608TYPE
GJ41	24000445	CHIP JUMPER, 1608TYPE
GJ61	24000445	CHIP JUMPER, 1608TYPE
GJ62	24000445	CHIP JUMPER, 1608TYPE
GJ63	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ64	24000445	CHIP JUMPER, 1608TYPE
GJ65	24000445	CHIP JUMPER, 1608TYPE
GJ66	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ67	24000445	CHIP JUMPER, 1608TYPE
GJ68	24000445	CHIP JUMPER, 1608TYPE
GJ69	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ71	24000445	CHIP JUMPER, 1608TYPE
GJ72	24000445	CHIP JUMPER, 1608TYPE
GJ73	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ74	24000445	CHIP JUMPER, 1608TYPE
GJ75	24000445	CHIP JUMPER, 1608TYPE
GJ76	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ77	24000445	CHIP JUMPER, 1608TYPE
GJ77	24000445	CHIP JUMPER, 1608TYPE
GJ78	24000445	CHIP JUMPER, 1608TYPE
GJ79	23103237	CHIP BEAD INDUCTOR 102OHM, TEM2141AD
GJ80	24000445	CHIP JUMPER, 1608TYPE
GJ81	24000824	CHIP JUMPER, 2125TYPE
GJ82	24000824	CHIP JUMPER, 2125TYPE
GJ83	24000824	CHIP JUMPER, 2125TYPE
GJ91	24000445	CHIP JUMPER, 1608TYPE
GJ92	24000445	CHIP JUMPER, 1608TYPE
GJ93	24000445	CHIP JUMPER, 1608TYPE
GJ97	24000445	CHIP JUMPER, 1608TYPE
GJ98	24000445	CHIP JUMPER, 1608TYPE
GJ201	24000445	CHIP JUMPER, 1608TYPE
GJ202	24000445	CHIP JUMPER, 1608TYPE
GJ203	24000445	CHIP JUMPER, 1608TYPE
GJ204	24011220	CHIP, METAL FILM, 1/20W 22 OHM J
GJ205	24000445	CHIP JUMPER, 1608TYPE
GJ207	24000445	CHIP JUMPER, 1608TYPE
GJ208	24000445	CHIP JUMPER, 1608TYPE
GJ208	24000445	CHIP JUMPER, 1608TYPE
GJ209	24000445	CHIP JUMPER, 1608TYPE
GJ210	24000445	CHIP JUMPER, 1608TYPE
GJ210	24000445	CHIP JUMPER, 1608TYPE
GJ211	24000445	CHIP JUMPER, 1608TYPE
GJ212	24000445	CHIP JUMPER, 1608TYPE
GJ216	24000445	CHIP JUMPER, 1608TYPE
GJ223	24000445	CHIP JUMPER, 1608TYPE
GJ224	24000445	CHIP JUMPER, 1608TYPE
GJ225	24000445	CHIP JUMPER, 1608TYPE
GJ226	24000445	CHIP JUMPER, 1608TYPE
GJ227	24000445	CHIP JUMPER, 1608TYPE
GJ228	24000445	CHIP JUMPER, 1608TYPE
GJ229	24000445	CHIP JUMPER, 1608TYPE
GJ664	24000445	CHIP JUMPER, 1608TYPE
GJ665	24000445	CHIP JUMPER, 1608TYPE
GJA33	24000445	CHIP JUMPER, 1608TYPE
GR99	24000445	CHIP JUMPER, 1608TYPE
GRD80	24366472	CARBON FILM, 1/6W 4.7K OHM J
GRD82	24366472	CARBON FILM, 1/6W 4.7K OHM J
H003	23124087	ANTENNA SWITCH, BUNPAI, RSU135X1
H003A	23740989	NUT, F-CONNECTOR 2H BS
JX601	24000445	CHIP JUMPER, 1608TYPE
JX602	24000445	CHIP JUMPER, 1608TYPE
K913	23306465	REMOCON HAND UNIT IR, IR
KB01	23000852	IC, REMOCON RECEIVER, PIC-37043TE2

Location No.	Parts No.	Description
P350	23368634	CONNECTOR, PLUG, B-B 1.5MM 25P, JDV-PS25LB-10-1
P410	23903025	CONNECTOR, SOCKET, B-B 1.5MM 25P JDV-R25LB-10-1
P540	23903040	SOCKET, B-B 2MM 56P TAIKO
P708	23902655	CONNECTOR, 15P
P709	23902655	CONNECTOR, 15P
P713	23164787	CONNECTOR, PLUG, 7P
P714	23164787	CONNECTOR, PLUG, 7P
P715	23164787	CONNECTOR, PLUG, 7P
P801	23372191	POWER CORD, U/C FL 125V7A
P802	23368013	CONNECTOR, PLUG, 2P 11.88MM W VT-JST
P900	23164563	CONNECTOR, PLUG 3P
P900	23164563	CONNECTOR, PLUG 3P
P900	23164563	CONNECTOR, PLUG 3P
P900	23164563	CONNECTOR, PLUG 3P
PB13A	23367677	PLUG, 4P L TYPE 2.5MM
PH001	23367724	CONNECTOR, PLUG, B-B 15P
PH002	23367724	CONNECTOR, PLUG, B-B 15P
PR80	23023028	JACK, EARPHONE YKB21-5206
PR83	23023028	JACK, EARPHONE YKB21-5206
PV02	23365819	JACK, 1S3P
PV04	23023027	PIN(1G+1B+2L:F+2R:F+1R)
PV05	23368646	PLUG, B-B 2MM 56P TAIKO
PV06	23903040	SOCKET, B-B 2MM 56P TAIKO
S602	23145412	SWITCH, SLIDE SWITCH
SA01	23145226	SWITCH, 1C1P, PUSH
SA02	23145226	SWITCH, 1C1P, PUSH
SA03	23145226	SWITCH, 1C1P, PUSH
SA04	23145226	SWITCH, 1C1P, PUSH
SA05	23145226	SWITCH, 1C1P, PUSH
SA06	23145226	SWITCH, 1C1P, PUSH
SA07	23145226	SWITCH, 1C1P, PUSH
SA08	23145226	SWITCH, 1C1P, PUSH
SA09	23145226	SWITCH, 1C1P, PUSH
SR81	23146577	RELAY, DLS5D1-O(M)0.25W
UZ01	23148024	SCAN CONVERTER MODUL, N.H, MVPU14
⚠ V901A	23903168	SOCKET, CVT3277-5104G SMK
⚠ V902A	23903168	SOCKET, CVT3277-5104G SMK
⚠ V903A	23903168	SOCKET, CVT3277-5104G SMK
W661	23151232	SPEAKER, SPK-1235, 160X160, 65HZ, 8 OHM
W662	23151232	SPEAKER, SPK-1235, 160X160, 65HZ, 8 OHM
W663	23351172	SPEAKER, TWC 50X50 16-OHM 15W, SPK-1417AM
W664	23351172	SPEAKER, TWC 50X50 16-OHM 15W, SPK-1417AM
X4401	23153721	CERAMIC RESONATOR, 503KHZ
X4402	23153721	CERAMIC RESONATOR, 503KHZ
XA01	23153533	CERAMIC RESONATOR, CERA RESO, TCR1082AM
XH401	23153752	CRYSTAL, 8.000 40PPM 50OHM
XV01	23153533	CERAMIC RESONATOR, CERA RESO, TCR1082AM
⚠ Z401	24083013	COMPOSITE PARTS, CR-BLOCK, TPA5010AH
Z405	23140203	SPARK GAP, 2.0-3.0KV C-010, AG20PC152F-L3N
Z410	23110841	FOCUS PACK, TPA6030
Z410	23110847	FOCUS PACK, TPA6030BY
Z450A	23501755	ANODE CABLE, 400LD FBT-C
⚠ Z801	23148734	MODULE, PROTECTOR, HIC1026A
ZH001	23103823	COIL, FILTER, TEM2027D
ZH002	23103823	COIL, FILTER, TEM2027D
ZH04	23103778	FILTER, FERRITE CORE, TFE1008
ZH05	23103840	FERRITE CORE, TFE1013
ZH121	23103823	COIL, FILTER, TEM2027D
ZH122	23103823	COIL, FILTER, TEM2027D
ZH141	23103823	COIL, FILTER, TEM2027D
ZH142	23103823	COIL, FILTER, TEM2027D
ZH161	23103823	COIL, FILTER, TEM2027D
ZH162	23103823	COIL, FILTER, TEM2027D
ZH408	23103823	COIL, FILTER, TEM2027D
ZH500	23103823	COIL, FILTER, TEM2027D
ZV12	23103840	FERRITE CORE, TFE1013
ZV13	23103840	FERRITE CORE, TFE1013
ZV14	23103840	FERRITE CORE, TFE1013
ZV15	23103840	FERRITE CORE, TFE1013
ZV16	23103840	FERRITE CORE, TFE1013
ZV17	23103840	FERRITE CORE, TFE1013
ZV18	23103840	FERRITE CORE, TFE1013
ZV19	23103840	FERRITE CORE, TFE1013
ZV20	23103840	FERRITE CORE, TFE1013
ZV60	23103778	FILTER, FERRITE CORE, TFE1008
ZV61	23103778	FILTER, FERRITE CORE, TFE1008

PC BOARD ASSEMBLIES

✻ E021Z	23787467	A/V BOARD, PD0646A1
✻ E022Z	23787725	REM BOARD, PD0646A2
✻ E031Z	23787458	CRT-D/R BOARD, PD0641A1
✻ E032Z	23787459	CRT-D/G BOARD, PD0641A2
✻ E033Z	23787460	CRT-D/B BOARD, PD0641A3
✻ E034Z	23787461	SVM/R BOARD, PD0641A4
✻ E035Z	23787462	SVM/G BOARD, PD0641A5
✻ E036Z	23787463	SVM/B BOARD, PD0641A6
✻ E041Z	23787915	FRONT-CON BOARD, PD0221A-1
✻ E042Z	23787916	FRONT-IN BOARD, PD0221A-2
✻ E044Z	23787917	FRONT-SEN BOARD, PD0221A-4
✻ E051Z	23786222	CONV-SEN BOARD, PD0079-1
✻ E052Z	23786223	CONV-SEN2 BOARD, PD0079-2
✻ E053Z	23786224	CONV-SEN3 BOARD, PD0079-3
✻ E054Z	23786225	CONV-SEN4 BOARD, PD0079-4
✻ U401	23787717	DPC BOARD, PD0077D
✻ U801	23787710	DEF/POWER BOARD, PD0640B
✻ U901	23787720	SIG/CONV BOARD, PD0639B
✻ UD01	23787523	WOW BOARD, PD0645B
✻ UH01	23787714	DIGI-CONV BOARD, PD0638D
✻ UV02	23787468	DVI BOARD, PD0647A

PICTURE TUBE

⚠ V901R	23086306	CRT CPLG R
⚠ V902G	23086307	CRT CPLG G
⚠ V903B	23086308	CRT CPLG B

TUNER

H001	23321411	TUNER, TIM 181CH IIC PH SHINSEN, EL967LW
HY01	23321412	TUNER, TIF 181CH IIC PH TDL, EL963L

ACCESSORIES

K912	23306458	REMOCON HAND UNIT IR, CTV, CT-90121
Y101	23565682	OWNER'S MANUAL, ENGLISH/FRENCH, 65HDX82

CABINET PARTS

A001	23411712	WOOD CAB SHIP 65HDX82
A102	23527203	GRILLE, SPK GRILLE ASSY 65HX81
A139	23451976	PUSH CATCH, CLICK
A140A	23427972	DOOR, DOOR PROPER 50HX81
A143	23445516	BUTTON, POWER 50HX81
A160	23469228	CASTER, TP50H60
A175	23929314	PIECE, CLIP, TZ50V61
A201	23540678	COVER, BEZEL 65H81

Location No.	Parts No.	Description
A202	23450389	PANEL, CONTROL PANEL ASSY 50HX81
A268	23540681	COVER, FRONT COVER 50HX81
A421	23540170	COVER, REAR BOARD 50A60
A424	23530340	BACK BOARD 65HDX82
A510	23030815	WOOD SCREW PTD #6 X 3/4 TNP LOCAL
A519	23030815	WOOD SCREW PTD #6 X 3/4 TNP LOCAL
A521	23030815	WOOD SCREW PTD #6 X 3/4 TNP LOCAL
A543	72471068	SCREW, 4X12
A701	23064865	CARTON, CARTON 65HDX82
A703	23946215	PACKING, TOP PACKING 65H81
A708	23946380	BOTTOM PACKING 65H82
K111	23405024	LENS, DELTA265A/B
K112	23405024	LENS, DELTA265A/B
K113	23405024	LENS, DELTA265A/B
K501	23311953	SCREEN, 65DM LENTI SHEET, SCREEN65DM-L
K502	23311954	SCREEN, 65DM FRESNEL, SCREEN65DM-F
K503	23311900	SCREEN, PROTECTOR 65AL AR T0, SCR-PRO65AL
K601	23405029	MIRROR, 65WL 65H81, MIRRORWL
T461	23236742	TRANSFORMER FLYBACK TFB3092AD

Location No.	Parts No.	Description

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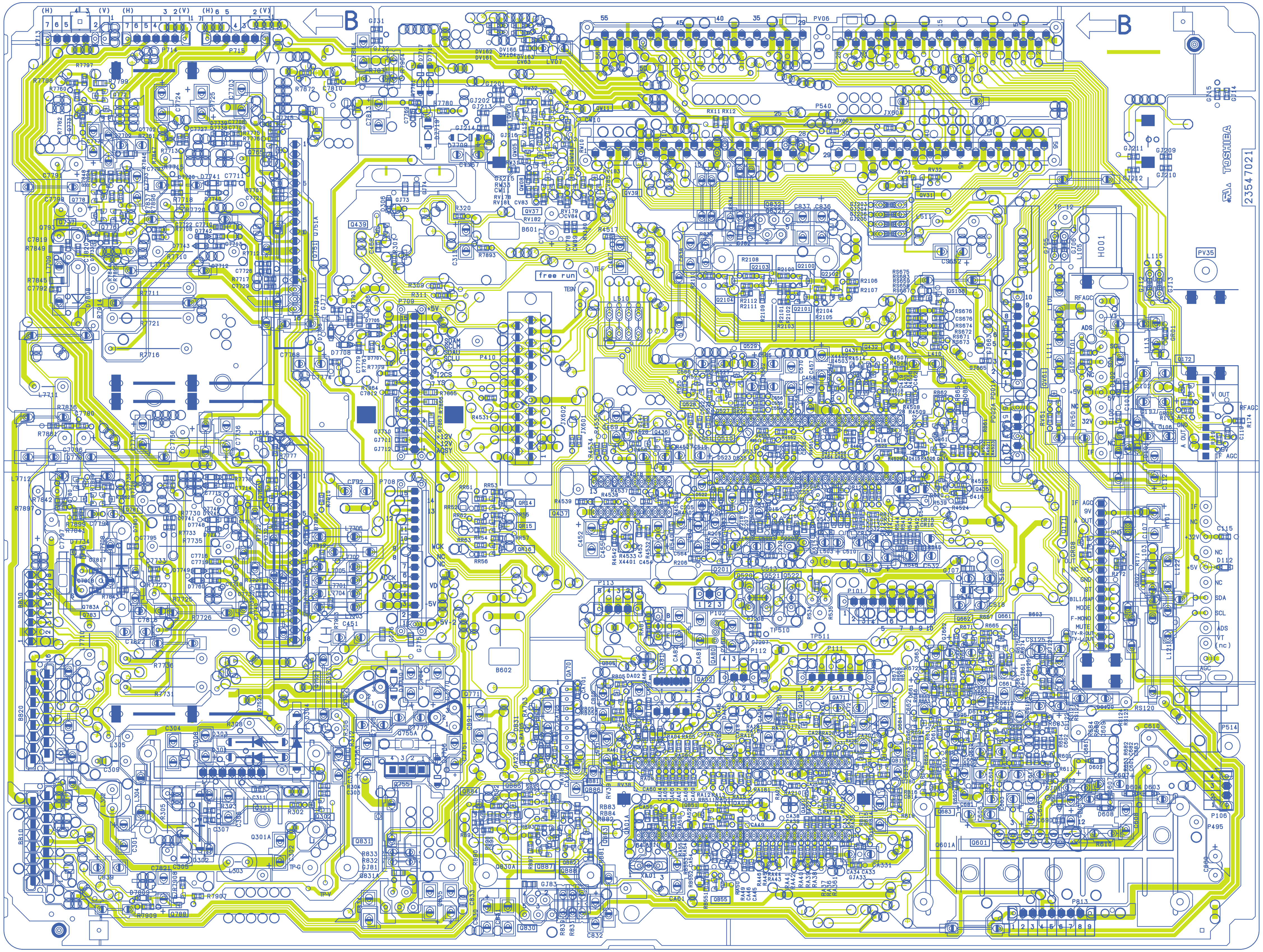
SIGNAL/CONV BOARD PD0639B

BOTTOM (FOIL) SIDE


B
B
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23547021
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H001
PV35
PV06
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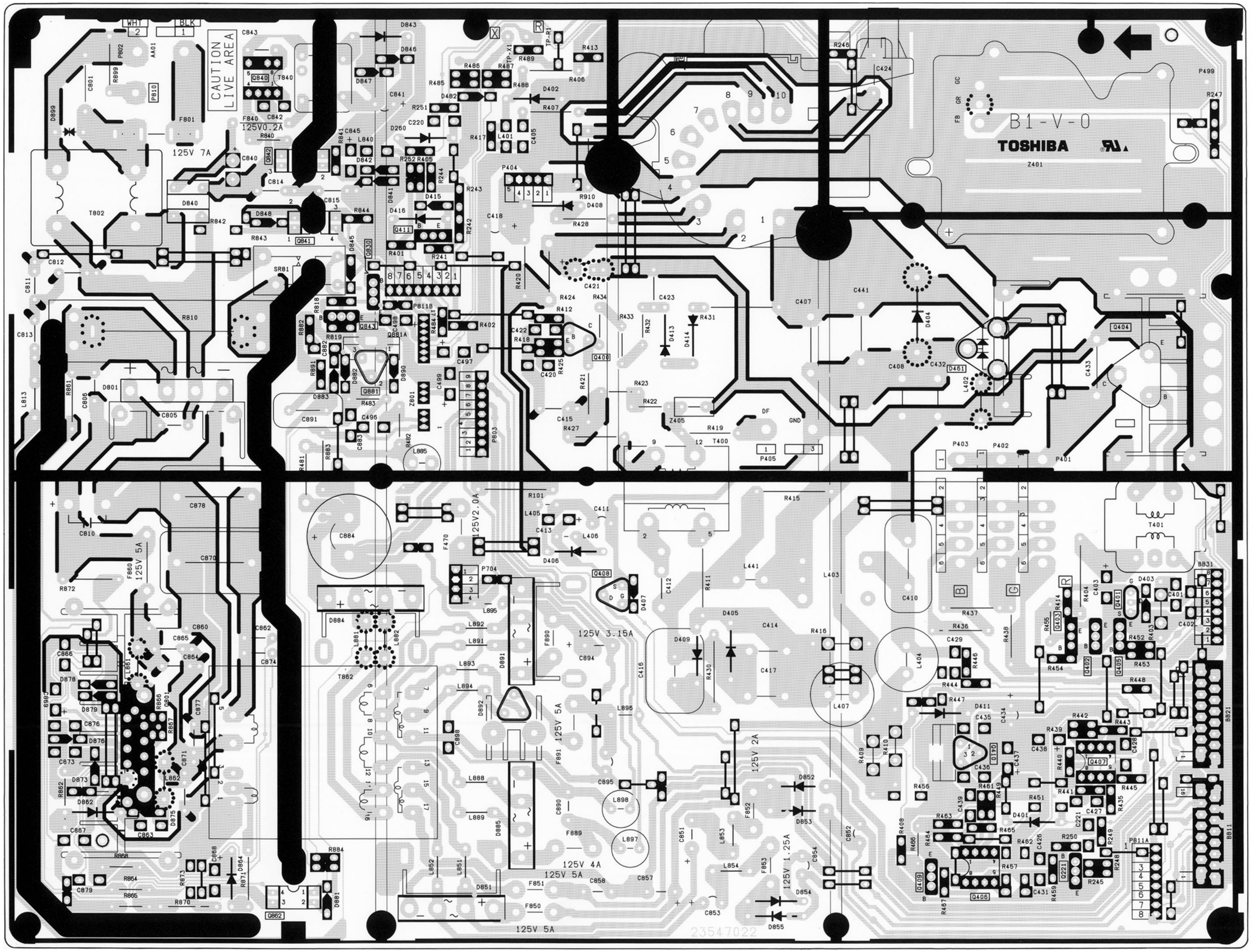
B810
B820
B830

DEF/POWER BOARD PD0640B

BOTTOM (FOIL) SIDE



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R487
R489
R488
R485
D482
R251
C220
D260
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L401
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R406
D402
R407
TP-X1
TP-R1
P404
R910
D408
R428
C418
R243
R242
R244
D415
D416
Q411
R252
R405
Q840
Q841
Q842
R840
C840
C842
C814
C815
D840
D848
R842
R843
R844
C845
L840
D842
D841
D845
Q830
R401
R241
R841
P802
R899
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R810
SR81
L813
R861
D801
C805
C806
C891
D883
R883
C883
R481
R482
Q881
Q881A
Q843
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R818
R882
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C496
Z801
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P803
L885
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P811B
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Q401
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AV BOARD PD0646A-1

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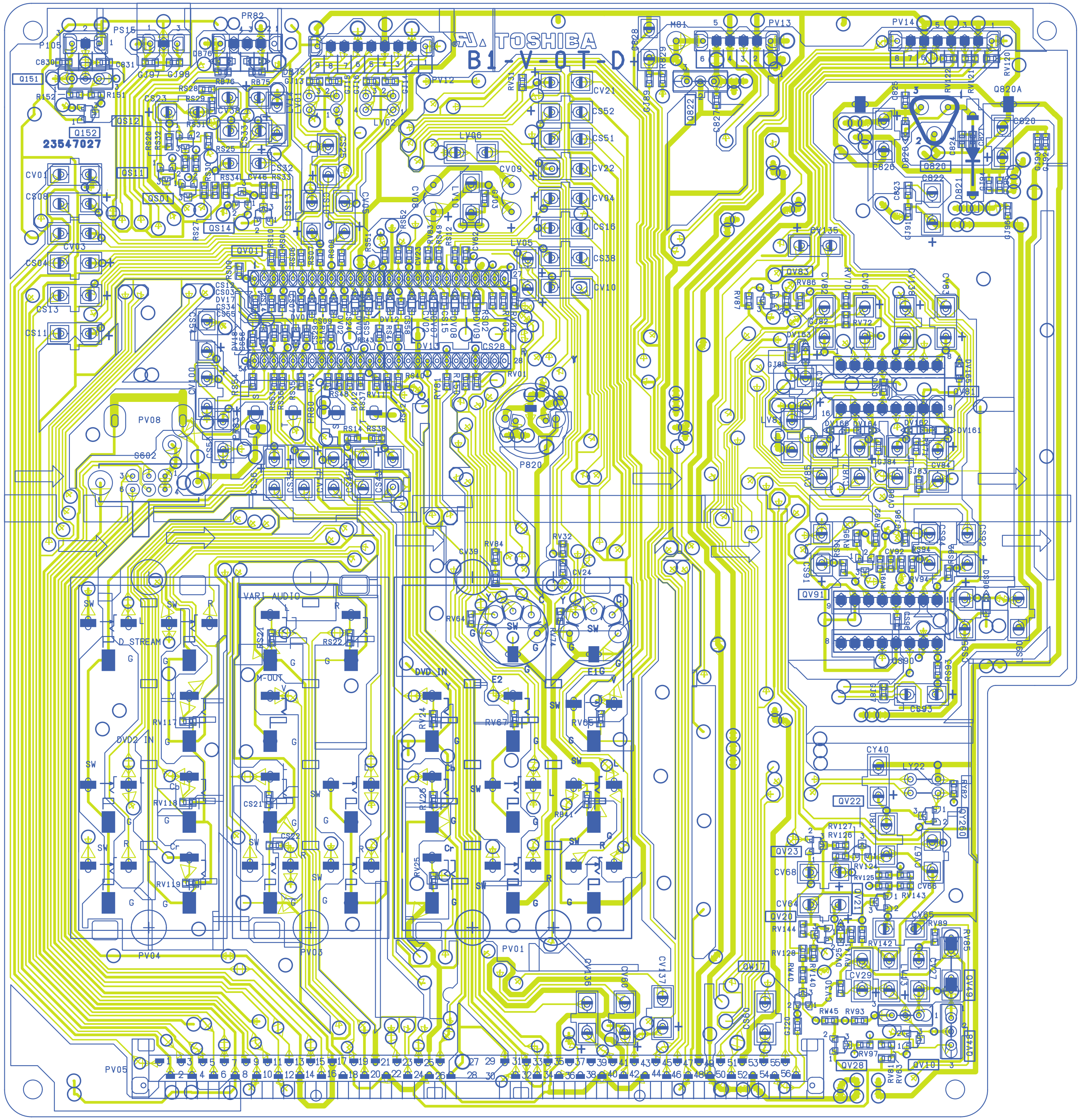
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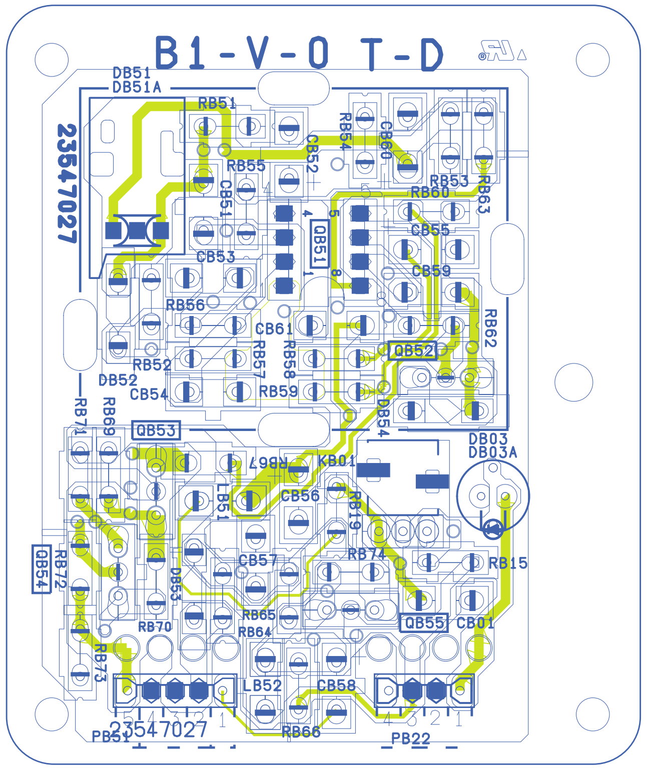
PV03
PV01
P820
VARI AUDIO
D STREAM
DVD2 IN
DVD IN
E2
E1G

REM BOARD PD0646A-2

BOTTOM (FOIL) SIDE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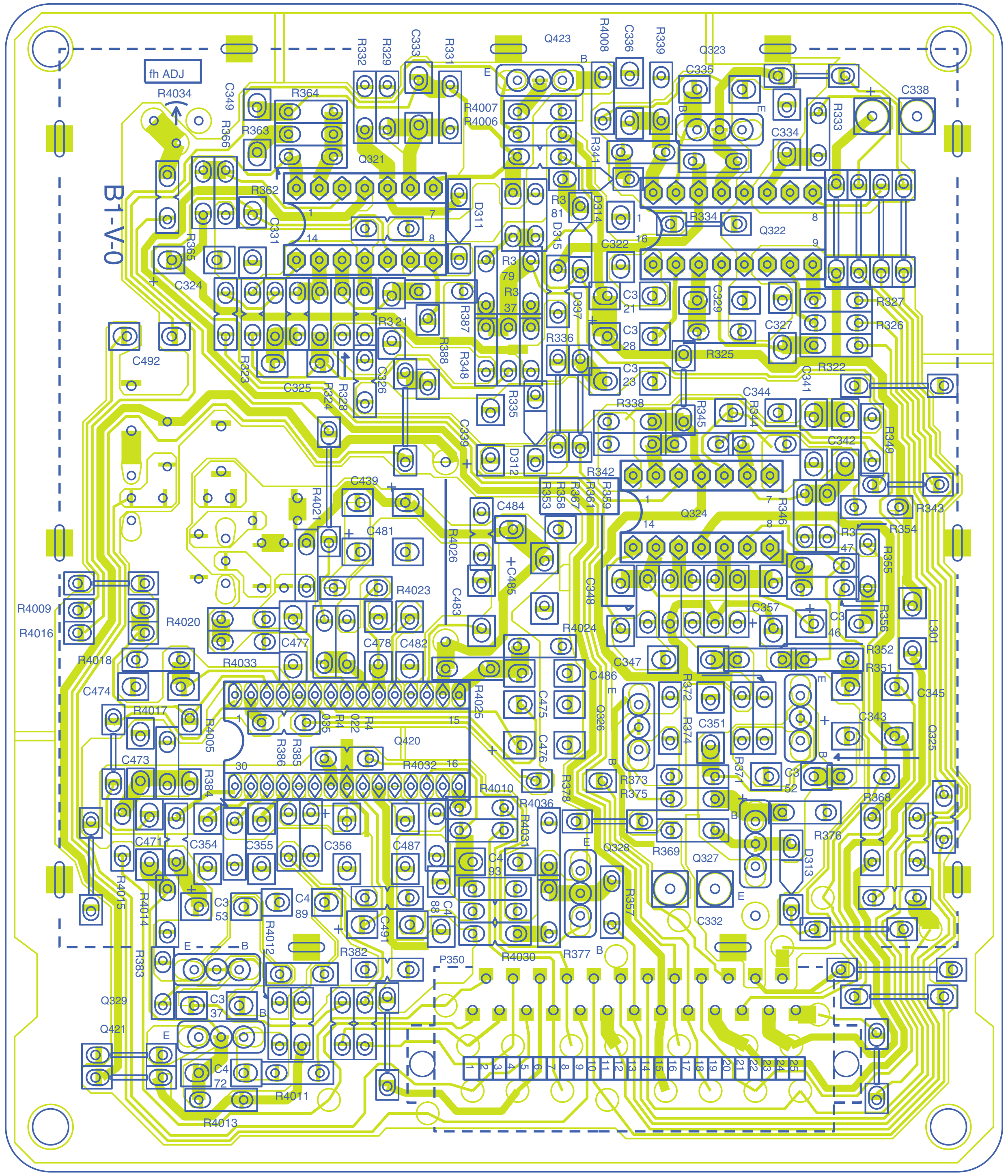
PB51
PB22

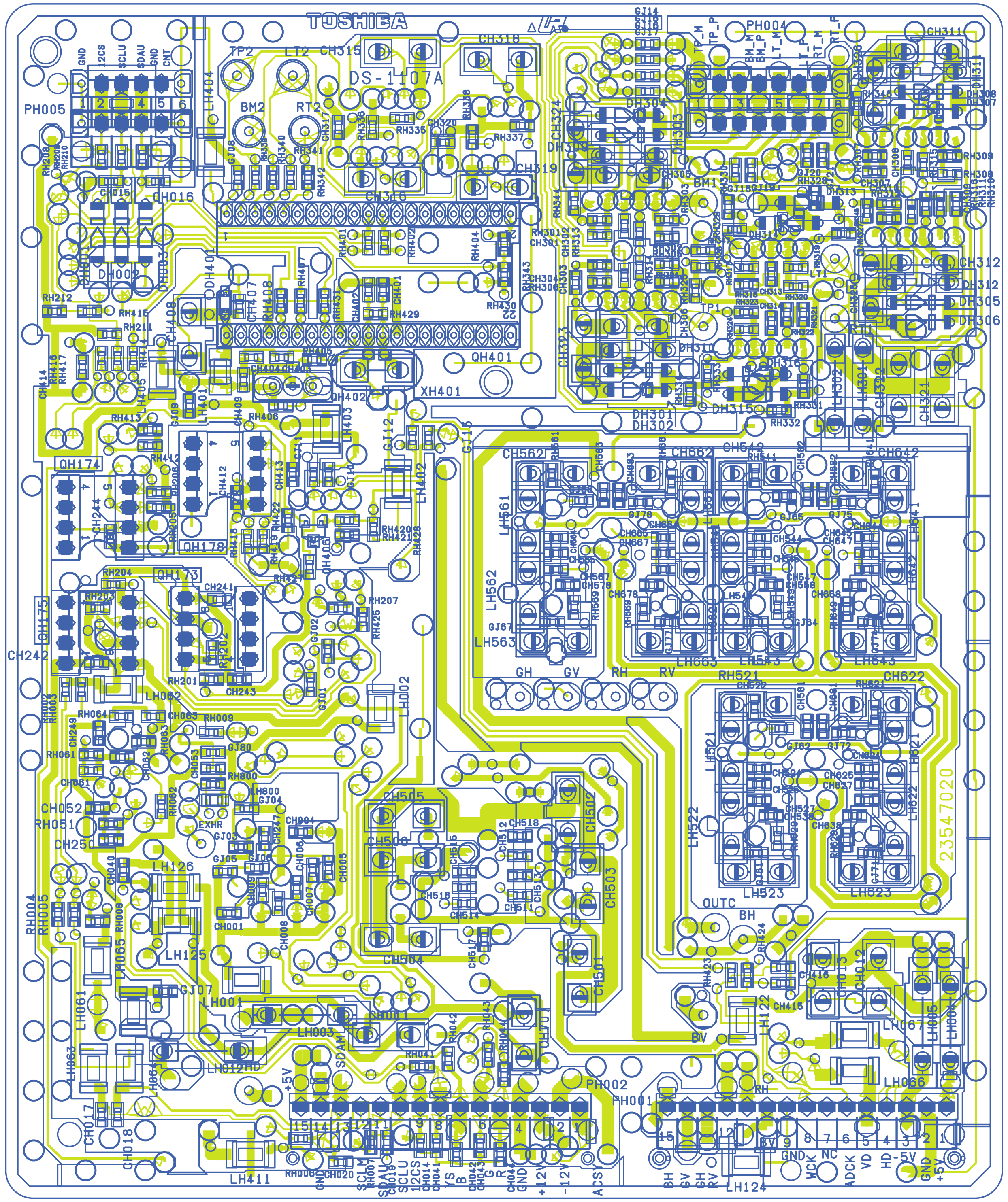
DPC BOARD PD0077D

BOTTOM (FOIL) SIDE



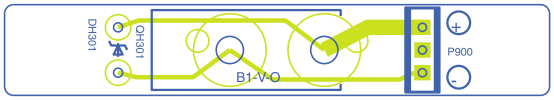
DIGI-CONV BOARD PD0638D

BOTTOM (FOIL) SIDE



CONV-SEN BOARD PD0079

BOTTOM (FOIL) SIDE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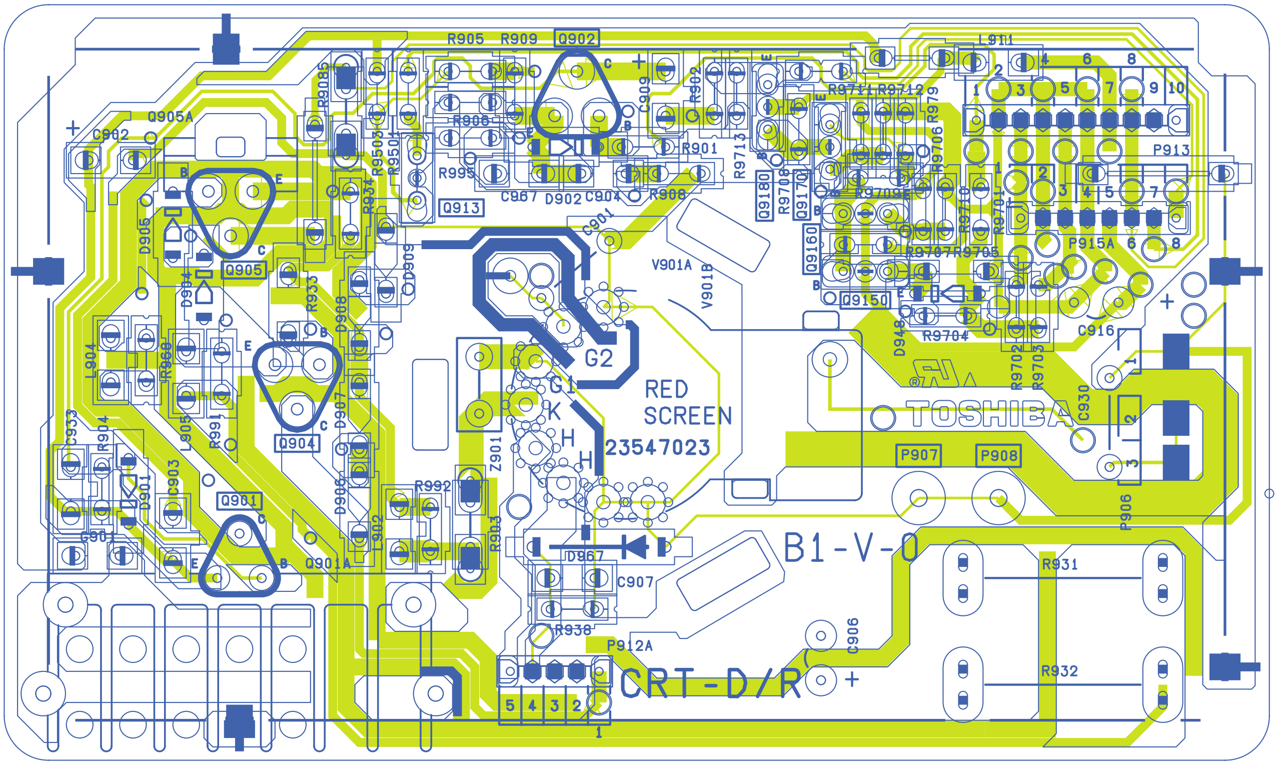
CRT DRIVE(RED) BOARD PD0641A-1

BOTTOM (FOIL) SIDE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R901
R908
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R9703
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Q905
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R933
D909
D908
C901
V901A
V901B
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G1
K
H
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R903
D967
C907
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C906
B1-V-0
CRT-D/R
TOSHIBA
P907
P908
R931
R932
1
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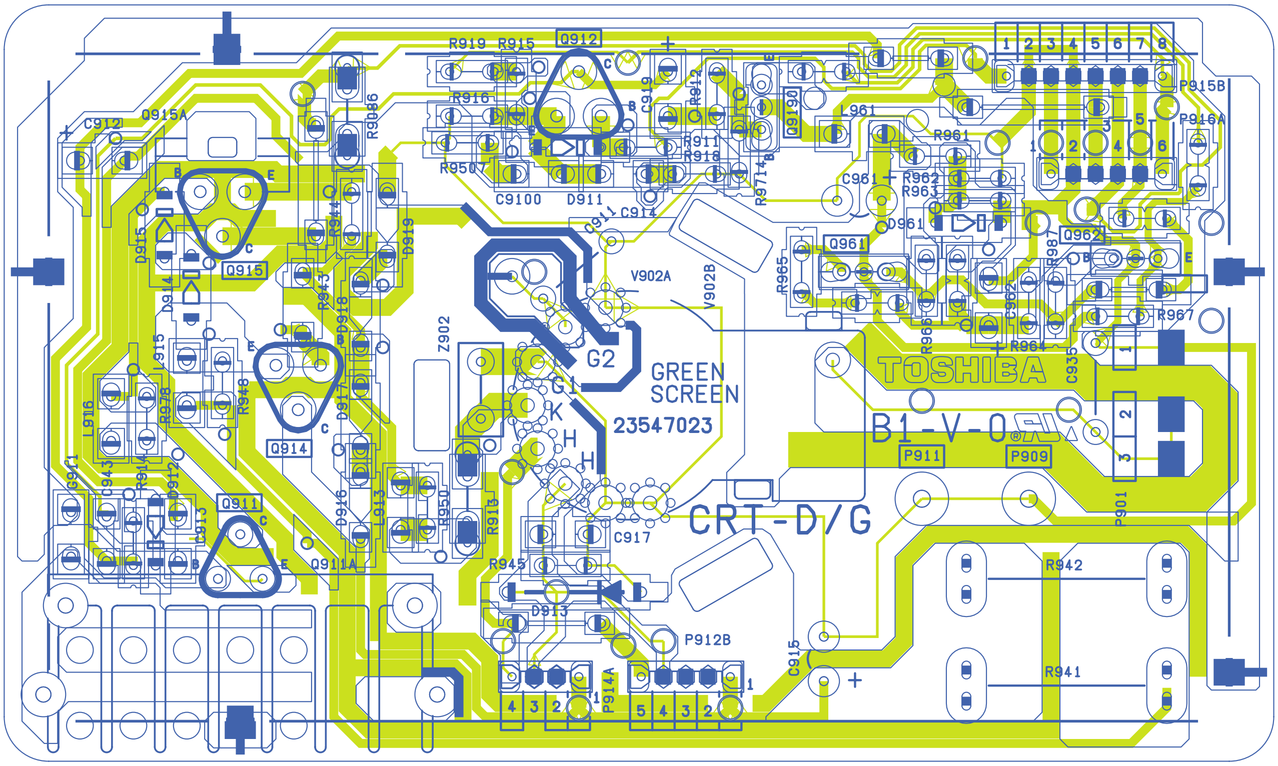
CRT DRIVE(GRN) BOARD PD0641A-2

BOTTOM (FOIL) SIDE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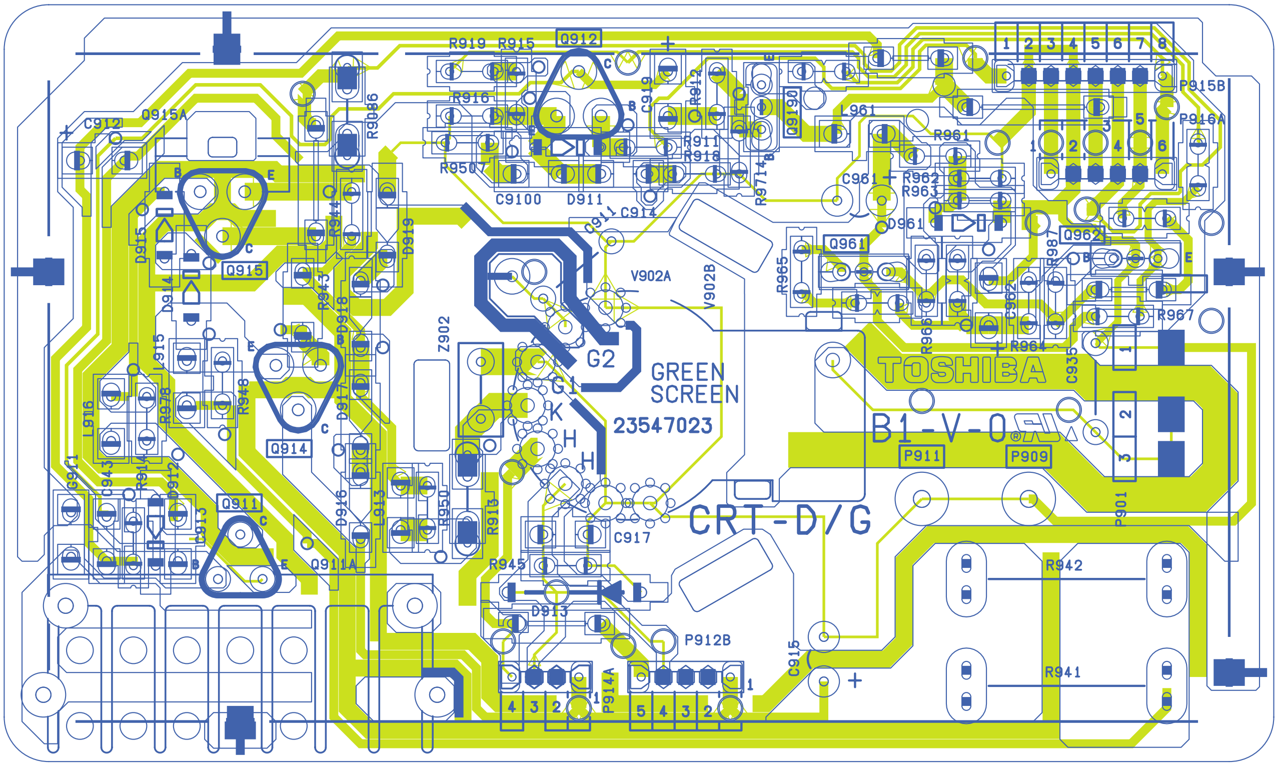
CRT DRIVE(BLE) BOARD PD0641A-3

BOTTOM (FOIL) SIDE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V902B
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K
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TOSHIBA
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CRT-D/G
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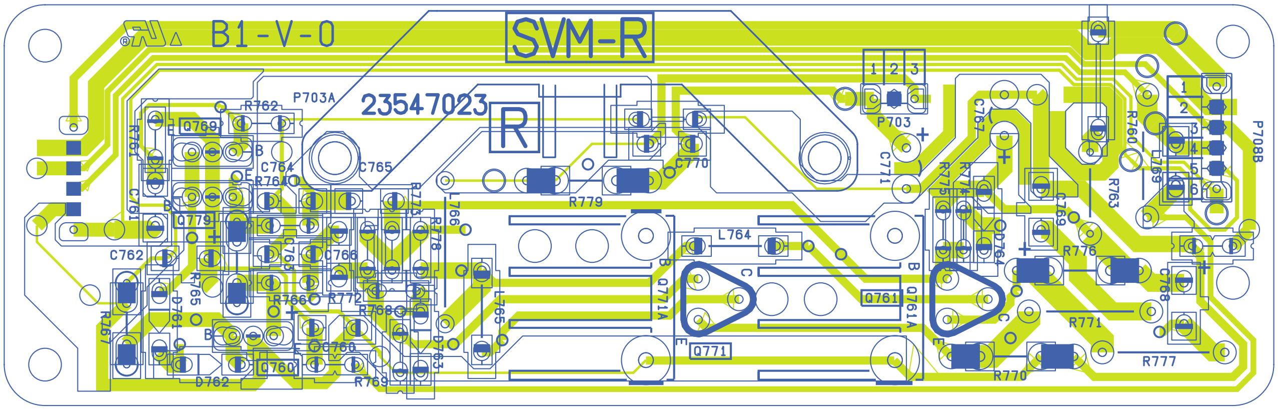
R941

SVM-R BOARD PD0641A-4

BOTTOM (FOIL) SIDE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C768
R771
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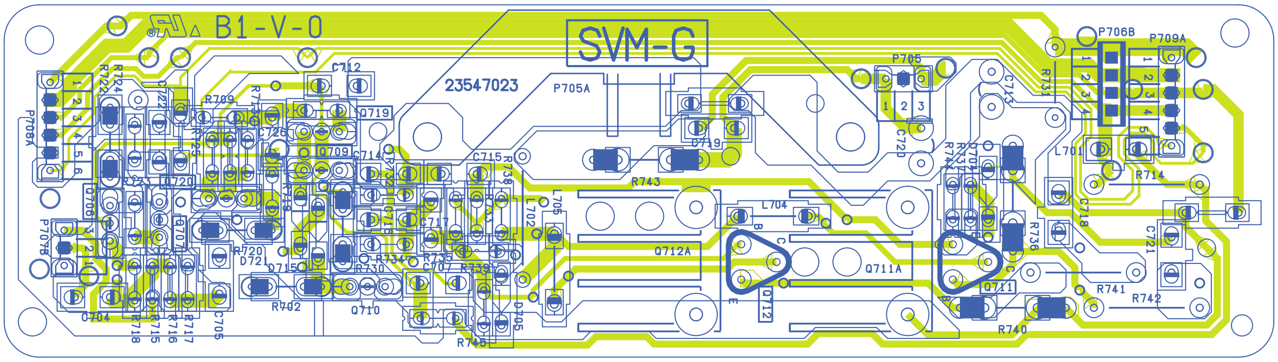
B
C
E

SVM-G BOARD PD0641A-5

BOTTOM (FOIL) SIDE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C715
R738
Q720
R723
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C707
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D704
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R718
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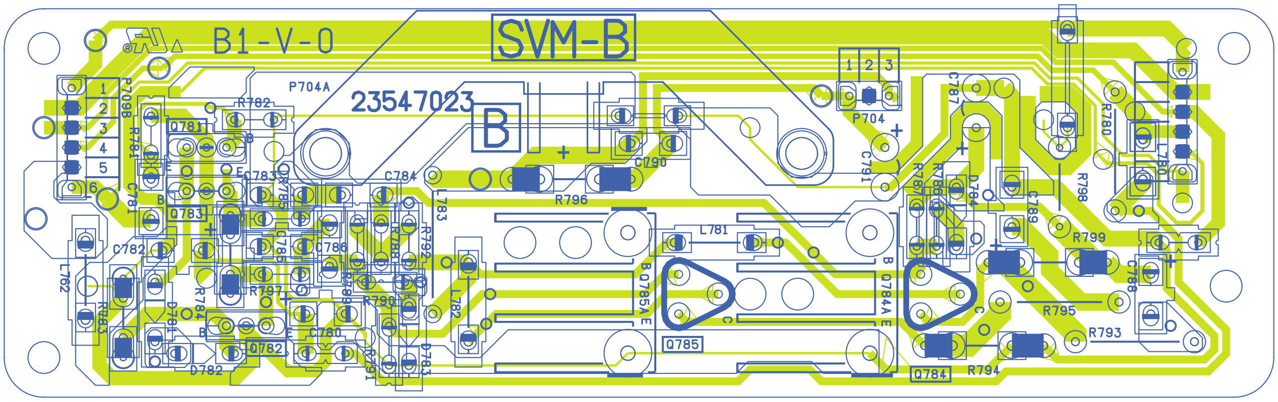
6
B
C
E

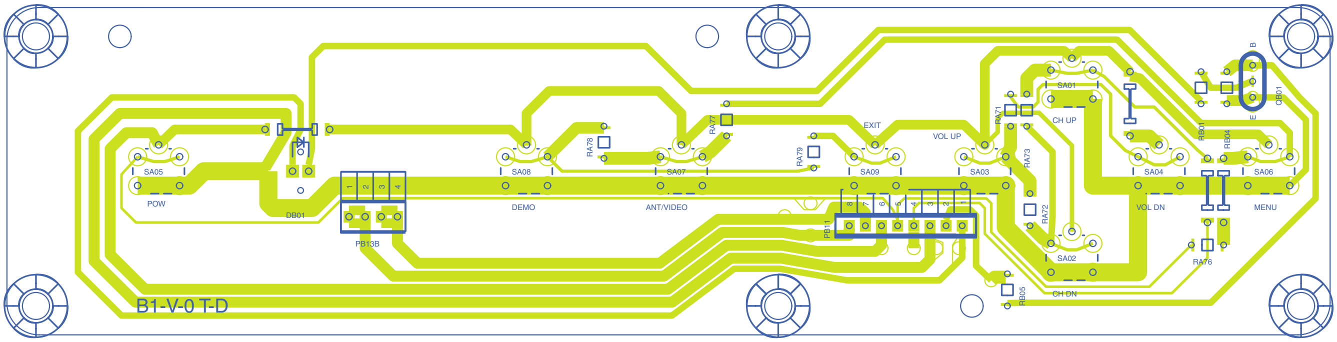
SVM-B BOARD PD0641A-6

BOTTOM (FOIL) SIDE


B1-V-0
SVM-B
23547023
B
P704A
P704
P709B
R782
R781
Q781
C781
C783
C782
Q783
L762
R783
R784
C784
C786
R797
R790
C780
D782
Q782
D781
D783
R791
R792
R786
L783
L782
R796
C790
L781
Q785A
Q785
Q784A
Q784
C787
C791
R785
R789
D784
C789
R799
R795
R793
R794
R798
R780
C788
1
2
3
4
5
6
B
C
E

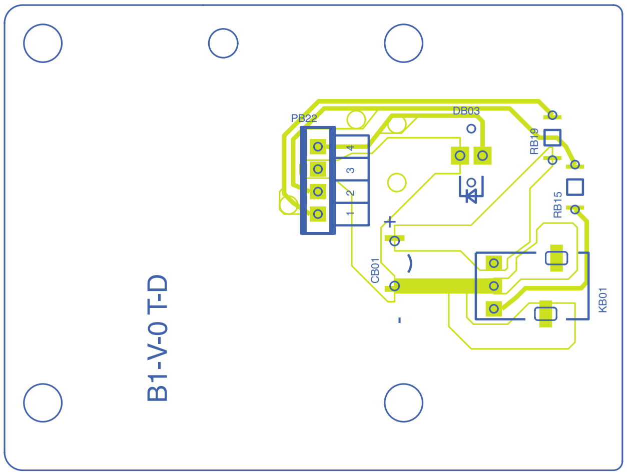
FRONT-CONTROL BOARD PD0221A-1

BOTTOM (FOIL) SIDE


SA05
POW
DB01
PB13B
1
2
3
4
SA08
DEMO
RA78
SA07
ANT/VIDEO
RA77
RA79
EXIT
SA09
VOL UP
SA03
PB11
8
7
6
5
4
3
2
1
RA71
RA73
RA72
SA01
CH UP
SA02
CH DN
RB05
SA04
VOL DN
RB01
RB04
RA76
SA06
MENU
B
E
QB01
B1-V-0 T-D

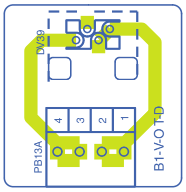
FRONT-SEN BOARD PD0221A-4

BOTTOM (FOIL) SIDE


PB22
4
3
2
1
DB03
RB19
RB15
+
CB01
-
KB01
B1-V-0 T-D

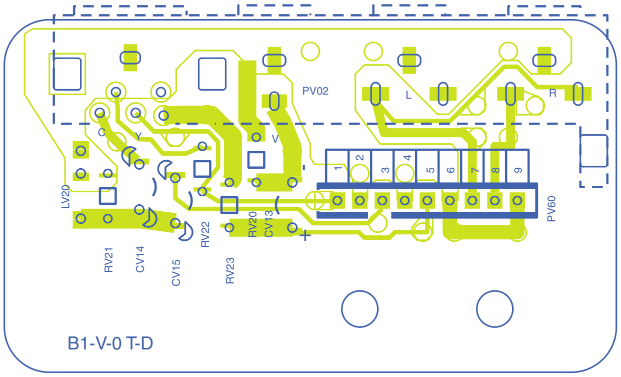
FRONT-ALS BOARD PD0221A-1

BOTTOM (FOIL) SIDE


DV39
4
3
2
1
PB13A
B1-V-0 T-D

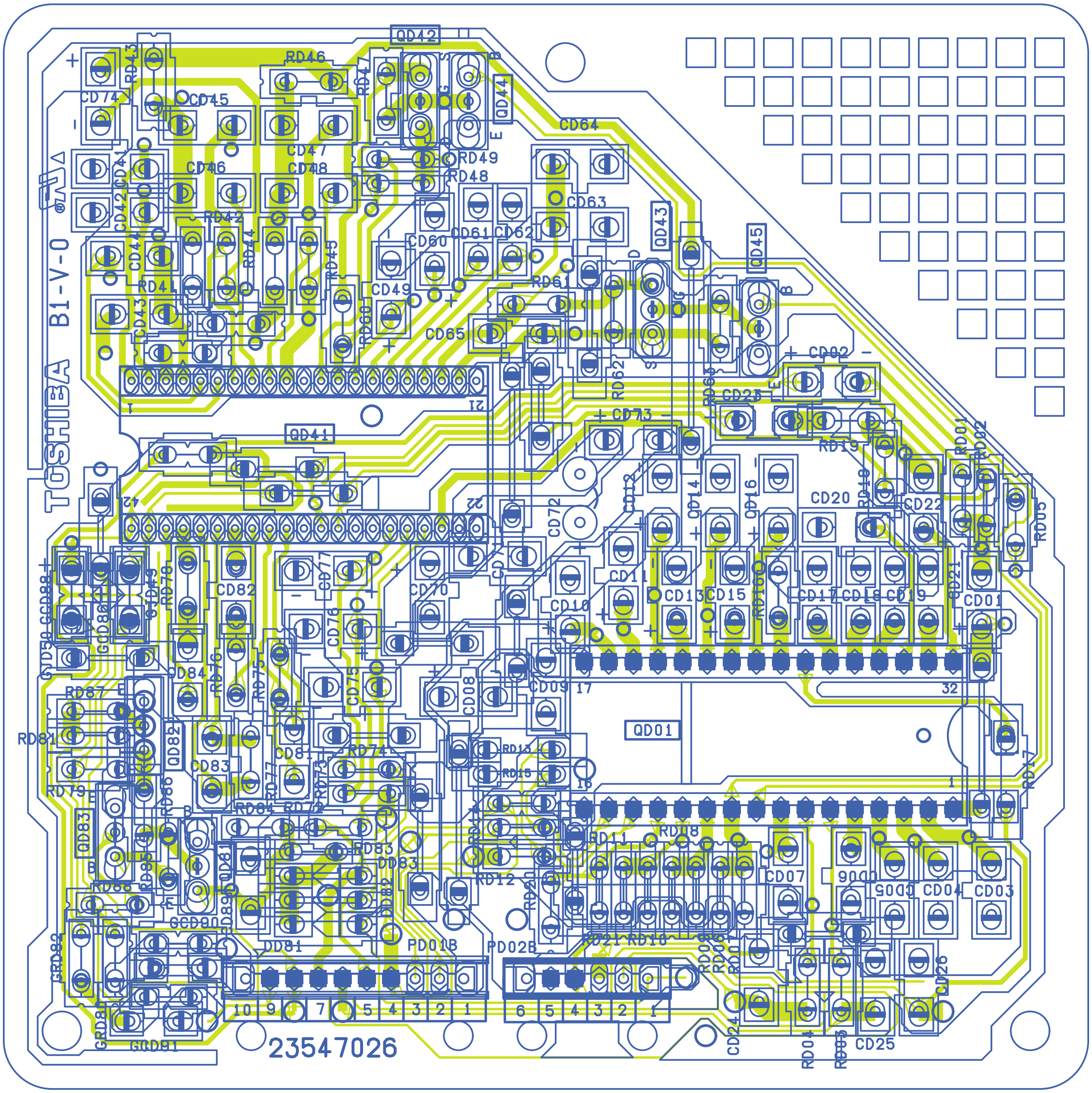
FRONT-IN BOARD PD0221A-2

BOTTOM (FOIL) SIDE


PV02
L
R
C
Y
V
1
2
3
4
5
6
7
8
9
PV60
LV20
RV21
CV14
CV15
RV22
RV23
RV20
CV13
+
B1-V-0 T-D

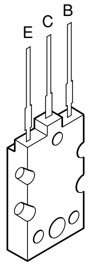
WOW BOARD PD0645B

BOTTOM (FOIL) SIDE

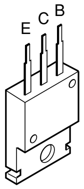

TOSHIBA
B1-V-0
23547026
QD01
QD41
QD42
QD43
QD44
QD45
PD01B
PD02B

TERMINAL VIEW OF TRANSISTORS

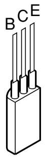
① 2SC5144
2SC5859



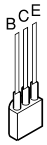
② 2SC3852
2SD1763A
2SC1569
2SC4544
2SA1788
2SA1306
2SA1186A



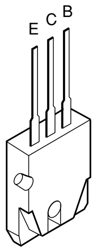
③ 2SC752GTM
2SC2482
2SC2655
2SC4721P



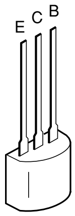
④ 2SC752
2SA562TM
2SA1015
2SC1815
2SC2878
2SC1740S
2SC2120
2SA9335



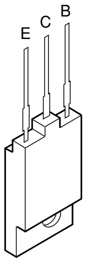
⑤ 2SA1788



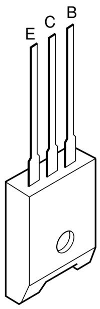
⑥ RN2203
RN2201
RN2004
RN1203
RN1204
RN2204
RN1205
RN1202
RN1201



⑦ 2SD1554
2SD2253
2SD1556
2SD2553
2SC5143



⑧ ON4409



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SCHEMATIC DIAGRAM

MODEL : 65HDX82

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

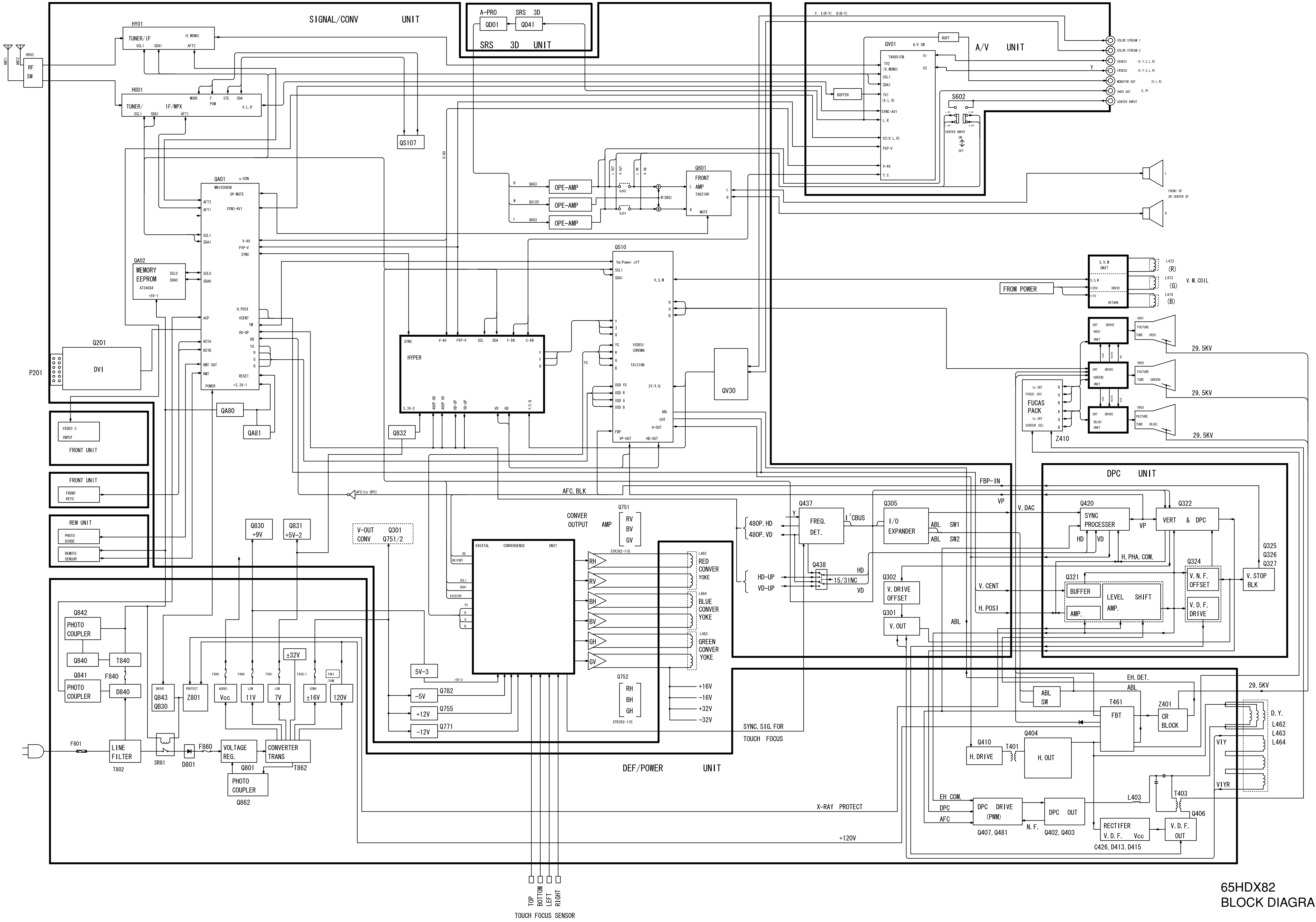
NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
   —+||— Electolytic capacitor —Ⓜ||— Mylar capacitor
3. The parts indicated with " ⚠ " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 120 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

■ SCHEMATIC DIAGRAM STRUCTURE:

- SIGNAL / CONVER Circuit
  - (Conver) [SHEET - 1/7]...................... 1/19
  - (Defrection) [SHEET - 2/7]...................... 2/19
  - (If) [SHEET - 3/7]...................... 3/19
  - (Maicon) [SHEET - 4/7]...................... 4/19
  - (Power) [SHEET - 5/7]...................... 5/19
  - (Audio) [SHEET - 6/7]...................... 6/19
  - (Video) [SHEET - 7/7]...................... 7/19
- POWER / DEF Circuit
  - (Power) [SHEET - 1/2]...................... 8/19
  - (Defrection) [SHEET - 2/2]...................... 9/19
- DPC Circuit 10/19
- DIGITAL CONVER Circuit
  - (1/2) [SHEET - 1/2].................... 11/19
  - (2/2) [SHEET - 2/2].................... 12/19
- AV / REM Circuit
  - (1/2) [SHEET - 1/2].................... 13/19
  - (2/2) [SHEET - 2/2].................... 14/19
- FRONT / T. FOCUS-SENSOR Circuit 15/19
- SRS-WOW Circuit.. 16/19
- CRT / SVM Circuit
  - (CRT) [SHEET - 1/2].................... 17/19
  - (SVM) [SHEET - 2/2].................... 18/19
- DVI Circuit 19/19

CIRCUIT BLOCK DIAGRAM


SIGNAL/CONV UNIT
SRS 3D UNIT
A-PRO
SRS 3D
QD01
QD41
A/V UNIT
QV01
TA8851CN
A/V SW
BUFF
BUFFER
S602
CENTER INPUT
COLOR STREAM 1
COLOR STREAM 2
VIDEO1
VIDEO2
MONITOR OUT
VAR3 OUT
CENTER INPUT
FRONT SP OR CENTER SP
ANT1
ANT2
H003
RF SW
HY01
TUNER/IF
H001
TUNER/ IF/MPX
QS107
QA01
μ-CON
MN102H85K
QA02
MEMORY EEPROM
AT24C64
Q201
DVI
P201
QA80
QA81
Q832
HYPER
OPE-AMP
Q601
FRONT AMP
TA8216H
Q510
VIDEO/ CHROMA
TA1316N
QV30
VIDEO 3 INPUT
FRONT UNIT
FRONT KEYS
REM UNIT
PHOTO DIODE
REMOTE SENSOR
Q830 +9V
Q831 +5V-2
V-OUT Q301
CONV Q751/2
AFC(to DPC)
AFC, BLK
CONVER OUTPUT AMP
Q751
RV
BV
GV
DIGITAL CONVERGENCE UNIT
RH
RV
BH
BV
GH
GV
L462 RED CONVER YOKE
L464 BLUE CONVER YOKE
L463 GREEN CONVER YOKE
STK392-110
Q752
RH
BH
GH
+16V
-16V
+32V
-32V
5V-3
-5V Q782
+12V Q755
-12V Q771
Q842 PHOTO COUPLER
Q840
T840
Q841 PHOTO COUPLER
F840
D840
Q843 QB30
Z801
Vcc
11V
7V
±16V
120V
±32V
F801
LINE FILTER
T802
SR81
D801
F860
VOLTAGE REG.
Q801
CONVERTER TRANS
T862
PHOTO COUPLER
Q862
DEF/POWER UNIT
X-RAY PROTECT
+120V
SYNC. SIG. FOR TOUCH FOCUS
TOP
BOTTOM
LEFT
RIGHT
TOUCH FOCUS SENSOR
FROM POWER
S.V.M UNIT
L472 (R)
L473 (G)
L474 (B)
V.M.COIL
CRT DRIVE (RED) UNIT
CRT DRIVE (GREEN) UNIT
CRT DRIVE (BLUE) UNIT
V901 PICTURE TUBE (RED)
V902 PICTURE TUBE (GREEN)
V903 PICTURE TUBE (BLUE)
29.5KV
FUCAS PACK
Z410
FBP-IN
VP
V.DAC
Q437
FREQ. DET.
I^2CBUS
Q305
I/O EXPANDER
ABL SW1
ABL SW2
480P.HD
480P.VD
HD-UP
VD-UP
Q438
15/31NC
HD
VD
Q302
V.DRIVE OFFSET
Q301
V.OUT
V.CENT
H.POSI
ABL
DPC UNIT
Q420
SYNC PROCESSER
Q322
VERT & DPC
H.PHA.COM.
Q321
BUFFER
AMP.
LEVEL SHIFT AMP.
Q324
V.N.F. OFFSET
V.D.F. DRIVE
Q325 Q326 Q327
V.STOP BLK
EH.DET.
ABL SW
T461
FBT
Z401
CR BLOCK
D.Y.
L462 L463 L464
VIY
VIYR
Q410
H.DRIVE
T401
Q404
H.OUT
EH COM.
DPC
AFC
DPC DRIVE (PWM)
Q407, Q481
DPC OUT
Q402, Q403
N.F.
L403
T403
Q406
RECTIFER V.D.F. Vcc
V.D.F. OUT
C426, D413, D415

65HDX82
BLOCK DIAGRAM

SPECIFICATIONS

<table>
<tr><td>TELEVISION SYSTEM</td><td>NTSC standard</td></tr>
<tr><td>CHANNEL COVERAGE</td><td>VHF: 2 through 13
UHF: 14 through 69
Cable TV: Mid band (A-8 through A-1, A through I)
Super band (J through W)
Hyper band (AA through ZZ, AAA, BBB)
Ultra band (65 through 94, 100 through 125)</td></tr>
<tr><td>POWER SOURCE</td><td>120 V AC, 60 Hz</td></tr>
<tr><td>POWER CONSUMPTION</td><td>180W (Average)</td></tr>
<tr><td>AUDIO POWER</td><td>15 W + 15 W</td></tr>
<tr><td>SPEAKER TYPE</td><td>Two 6-5/16 inches (16 cm) round</td></tr>
<tr><td>VIDEO/AUDIO TERMINALS</td><td>S-VIDEO INPUT
Y-INPUT: 1V (p-p), 75 ohm, negative sync.
C-INPUT: 0.286 V(p-p) (burst signal), 75 ohm
VIDEO/AUDIO INPUT
VIDEO: 1 V(p-p), 75 ohm, negative sync.
AUDIO: 150 mV(rms) (30% modulation equivalent, 47 kohm)
ColorStream™ (Component video) INPUT
Y-INPUT: 1 V(p-p), 75 ohm
P_R-INPUT: 0.7 V(p-p), 75 ohm
P_B-INPUT: 0.7 V(p-p), 75 ohm
AUDIO: 150mV(rms). 47 kohm
VIDEO/AUDIO OUTPUT
VIDEO: 1 V(p-p), 75 ohm, negative sync.
AUDIO: 150 mV(rms) (30% modulation equivalent, 4.7 kohm)
VARIABLE AUDIO OUTPUT
0-300 mV(rms) (30% modulation equivalent, 4.7 kohm)
AUDIO CENTER CHANNEL INPUT
300 mV(rms) (30% modulation equivalent, 10 kohm)</td></tr>
<tr><td>DIMENSIONS/MASS</td><td><table><tr><th></th><th>Dimension (W/H/D)</th><th>Mass</th></tr><tr><td>65HDX82</td><td>59-1/2 x 60-7/8 x 26.0 inches
(1,511 x 1,546 x 660 mm)</td><td>299 lbs
(136 kg)</td></tr></table></td></tr>
<tr><td>SUPPLIED ACCESSORIES</td><td>Remote Control with 2 size “AA” alkaline batteries</td></tr>
</table>

*Please refer to owner's manual in detail.

– END –

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

SCHEMATIC DIAGRAM

MODEL : 65HDX82

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

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  - (Maicon) [SHEET - 4/7] 4/19
  - (Power) [SHEET - 5/7] 5/19
  - (Audio) [SHEET - 6/7] 6/19
  - (Video) [SHEET - 7/7] 7/19
- POWER / DEF Circuit
  - (Power) [SHEET - 1/2] 8/19
  - (Defrection) [SHEET - 2/2] 9/19
- DPC Circuit 10/19
- DIGITAL CONVER Circuit
  - (1/2) [SHEET - 1/2] 11/19
  - (2/2) [SHEET - 2/2] 12/19
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  - (2/2) [SHEET - 2/2] 14/19
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- SRS-WOW Circuit 16/19
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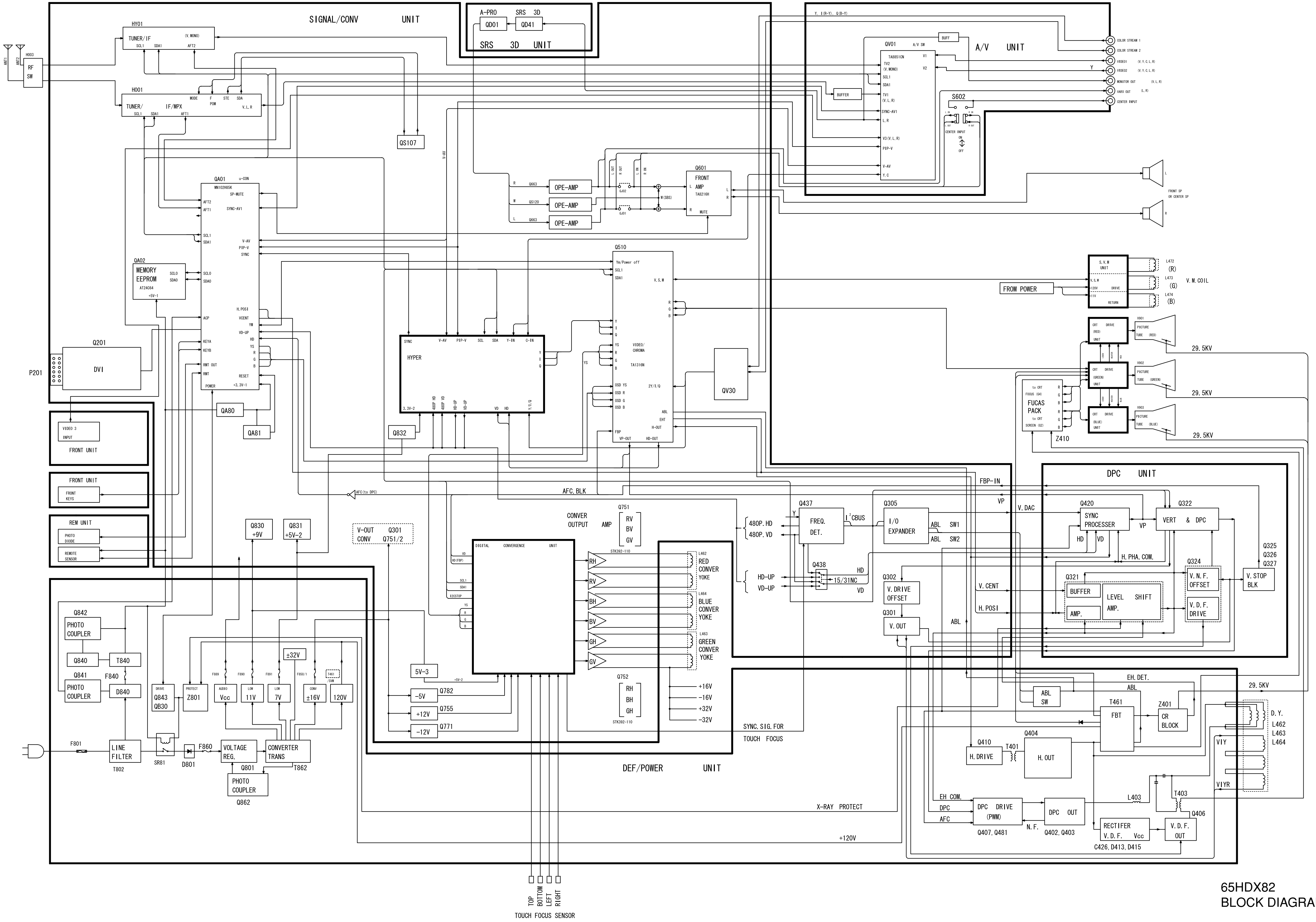
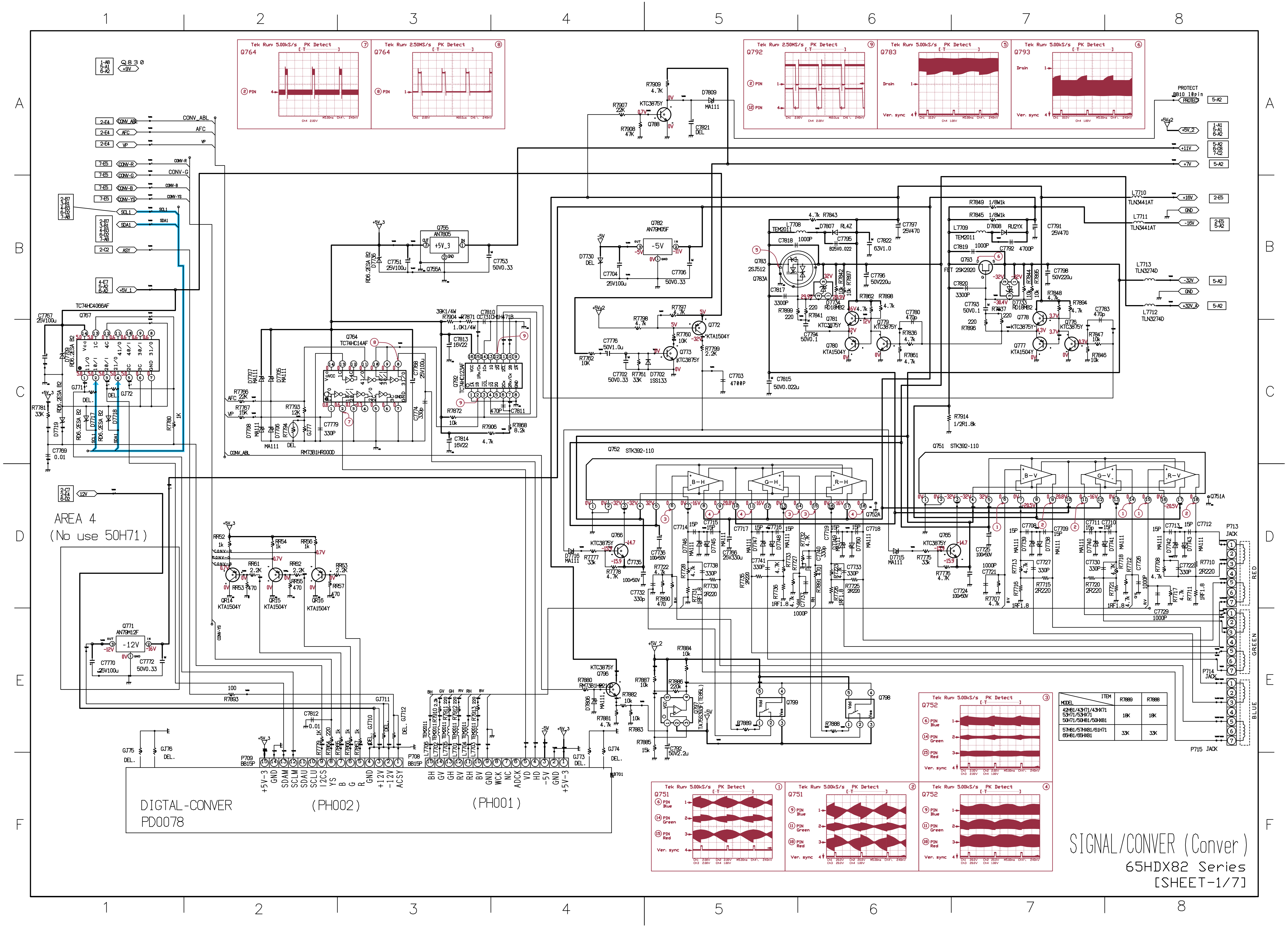
  - (CRT) [SHEET - 1/2] 17/19
  - (SVM) [SHEET - 2/2] 18/19
- DVI Circuit 19/19

CIRCUIT BLOCK DIAGRAM


SIGNAL/CONV UNIT
SRS 3D UNIT
A-PRO
SRS 3D
QD01
QD41
A/V UNIT
DPC UNIT
DEF/POWER UNIT
FRONT UNIT
REM UNIT
ANT1
ANT2
H003
RF SW
HY01
TUNER/IF
H001
TUNER/ IF/MPX
QS107
QA01
μ-CON
MN102H85K
QA02
MEMORY EEPROM
AT24C64
Q201
DVI
P201
QA80
QA81
VIDEO 3 INPUT
FRONT KEYS
PHOTO DIODE
REMOTE SENSOR
HYPER
Q832
Q510
VIDEO/CHROMA
TA1316N
QV30
Q601
FRONT AMP
TA8216H
Q663
Q5120
OPE-AMP
QV01
TA8851CN
A/V SW
BUFF
BUFFER
S602
CENTER INPUT
COLOR STREAM 1
COLOR STREAM 2
VIDEO1
VIDEO2
MONITOR OUT
VAR3 OUT
CENTER INPUT
FRONT SP OR CENTER SP
FROM POWER
S.V.M UNIT
L472 (R)
L473 (G)
L474 (B)
V.M.COIL
CRT DRIVE (RED) UNIT
CRT DRIVE (GREEN) UNIT
CRT DRIVE (BLUE) UNIT
V901 PICTURE TUBE (RED)
V902 PICTURE TUBE (GREEN)
V903 PICTURE TUBE (BLUE)
29.5KV
FUCAS PACK
Z410
FBP-IN
AFC, BLK
AFC(to DPC)
Q830 +9V
Q831 +5V-2
V-OUT Q301
CONV Q751/2
DIGITAL CONVERGENCE UNIT
CONVER OUTPUT AMP
Q751
RV BV GV
STK392-110
RH RV BH BV GH GV
L462 RED CONVER YOKE
L464 BLUE CONVER YOKE
L463 GREEN CONVER YOKE
Q752
RH BH GH
+16V
-16V
+32V
-32V
SYNC. SIG. FOR TOUCH FOCUS
5V-3
-5V Q782
+12V Q755
-12V Q771
Q842 PHOTO COUPLER
Q840
T840
Q841 PHOTO COUPLER
F840
D840
Q843 QB30
Z801
Vcc
11V
7V
±16V
120V
±32V
F801
LINE FILTER
T802
SR81
D801
F860
VOLTAGE REG.
Q801
CONVERTER TRANS
T862
PHOTO COUPLER
Q862
X-RAY PROTECT
+120V
TOP
BOTTOM
LEFT
RIGHT
TOUCH FOCUS SENSOR
Q437
FREQ. DET.
I²CBUS
480P. HD
480P. VD
Q305
I/O EXPANDER
ABL SW1
ABL SW2
Q438
15/31NC
HD-UP
VD-UP
HD
VD
VP
V. DAC
Q302
V. DRIVE OFFSET
Q301
V. OUT
V. CENT
H. POSI
ABL
Q420
SYNC PROCESSER
Q322
VERT & DPC
H. PHA. COM.
Q321
BUFFER
AMP.
LEVEL SHIFT AMP.
Q324
V. N. F. OFFSET
V. D. F. DRIVE
Q325
Q326
Q327
V. STOP BLK
EH. DET.
ABL SW
T461
FBT
Z401
CR BLOCK
D. Y.
L462
L463
L464
VIY
VIYR
Q410
H. DRIVE
T401
Q404
H. OUT
EH COM.
DPC
AFC
DPC DRIVE (PWM)
Q407, Q481
N. F.
DPC OUT
Q402, Q403
L403
T403
Q406
RECTIFER V. D. F. Vcc
V. D. F. OUT
C426, D413, D415

65HDX82
BLOCK DIAGRAM

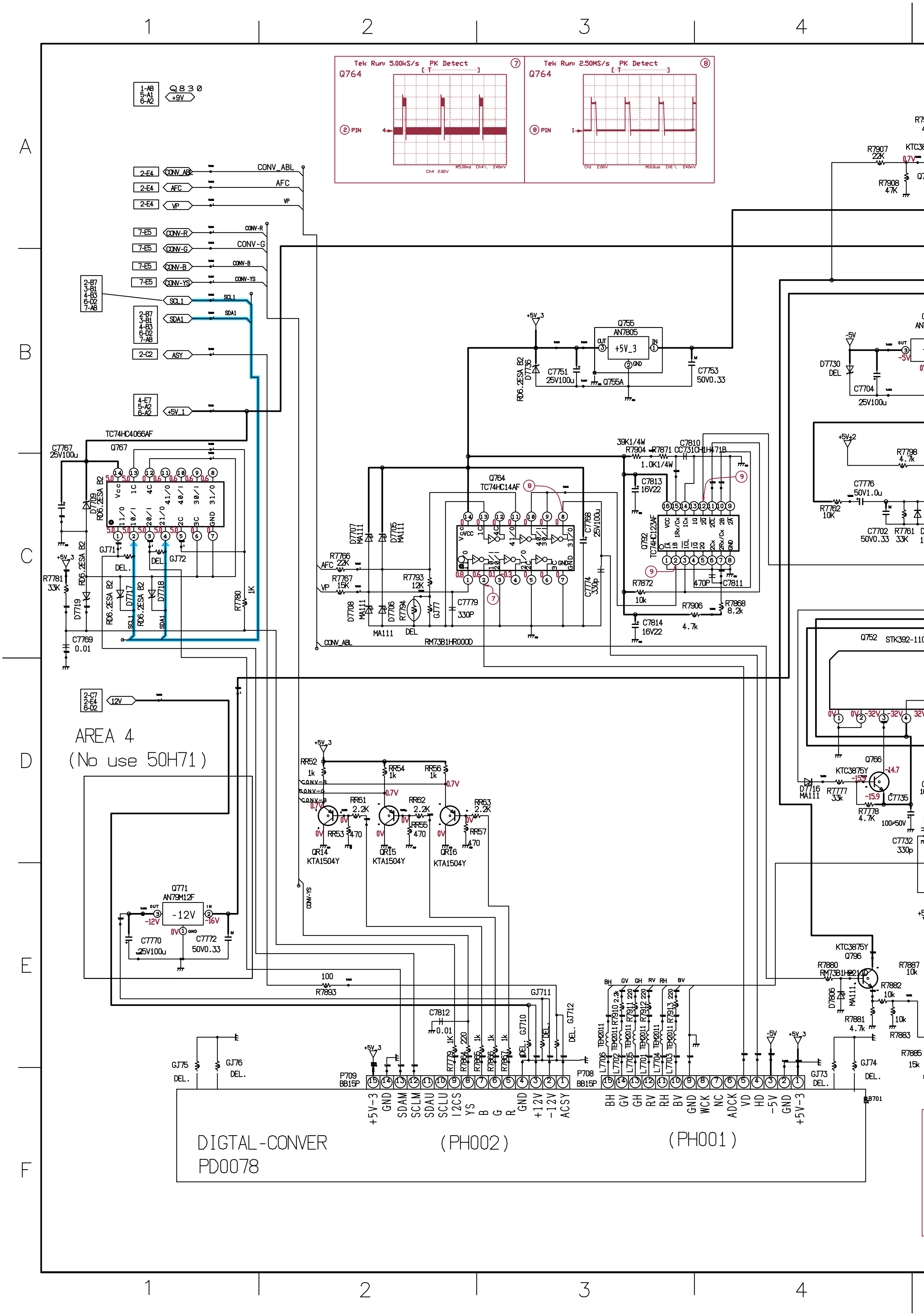

Q830
+9V
CONV_ABL
AFC
VP
CONV-R
CONV-G
CONV-B
CONV-YS
SCL1
SDA1
ASY
+5V_1
TC74HC4066AF
Q767
GJ71
GJ72
DEL.
AREA 4
(No use 50H71)
12V
Q771
AN79M12F
-12V
C7770
25V100u
C7772
50V0.33
Q755
AN7805
+5V_3
C7751
25V100u
C7753
50V0.33
Q764
TC74HC14AF
Q792
TC74HC123AF
RM73B1HR000D
Q782
AN79M05F
-5V
C7704
25V100u
C7706
50V0.33
Q788
KTC3875Y
R7909
4.7K
D7809
MA111
C7821
DEL
Q772
KTA1504Y
Q773
KTC3875Y
Q783
2SJ512
Q793
2SK2920
L7708
TEM2011
L7709
TEM2011
D7807
RL4Z
D7808
RU2YX
C7797
25V470
C7791
25V470
Q778
Q779
KTC3875Y
Q780
Q777
KTA1504Y
Q776
L7710
TLN3441AT
L7711
TLN3441AT
L7713
TLN3274D
L7712
TLN3274D
PROTECT
BB10 10pin
+5V_2
+11V
+7V
+16V
GND
-16V
-32V
+32V
Q752
STK392-110
Q751
STK392-110
B-H
G-H
R-H
B-V
G-V
R-V
Q752A
Q751A
Q766
Q765
KTC3875Y
QR14
QR15
QR16
KTA1504Y
Q796
KTC3875Y
Q797
TA75S393F(TE85L)
Q799
Q798
R7889
R7888
P713 JACK
P714 JACK
P715 JACK
RED
GREEN
BLUE
GJ711
GJ710
GJ712
GJ75
GJ76
GJ74
GJ73
P709
BB15P
P708
BB15P
+5V-3
GND
SDAM
SCLM
SDAU
SCLU
I2CS
YS
B
G
R
+12V
-12V
ACSY
BH
GV
GH
RV
RH
BV
WCK
NC
ADCK
VD
HD
-5V
+5V-3
DIGTAL-CONVER
PD0078
(PH002)
(PH001)
Tek Run: 5.00kS/s PK Detect
Tek Run: 2.50MS/s PK Detect
Q764
Q792
Q783
Q793
Q752
Q751
Drain
Ver. sync
PIN Blue
PIN Green
PIN Red
1
2
3
4
5
6
7
8
A
B
C
D
E
F

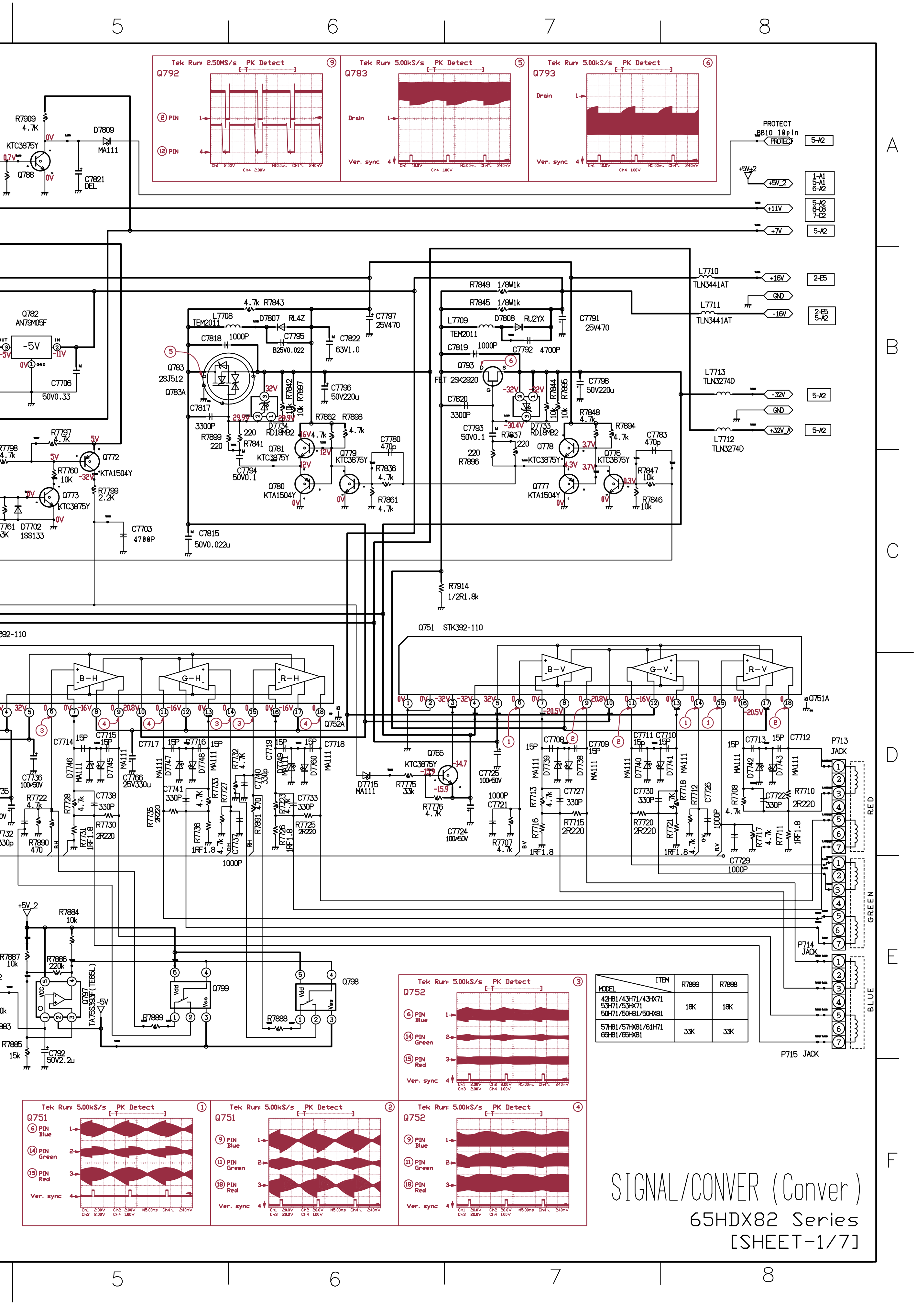
ITEM / MODEL	R7889	R7888
42H81/43H71/43HX71 53H71/53HX71 50H71/50H81/50HX81	18K	18K
57H81/57HX81/61H71 65H81/65HX81	33K	33K

SIGNAL/CONVER (Conver)

65HDX82 Series

[SHEET-1/7]

1
2
3
4
A
B
C
D
E
F
Tek Run: 5.00kS/s PK Detect
Q764
⑦
② PIN
Tek Run: 2.50MS/s PK Detect
Q764
⑧
⑧ PIN
Q830
+9V
CONV_ABL
AFC
VP
CONV-R
CONV-G
CONV-B
CONV-YS
SCL1
SDA1
ASY
+5V_1
Q755
AN7805
+5V_3
Q755A
C7751 25V100u
C7753 50V0.33
RD6.2ESA B2 D7736
TC74HC4066AF
Q767
C7767 25V100u
Q764
TC74HC14AF
Q792
TC74HC123AF
39K1/4W R7904
R7871 1.0K1/4W
C7810 CC731CH1H471B
C7813 16V22
C7768 25V100u
C7774 330p
C7779 330P
R7793 12K
R7766 22K
R7767 15K
R7872 10k
R7906 4.7k
R7868 8.2k
C7814 16V22
C7811 470P
RM73B1HR000D
D7707 MA111
D7705 MA111
D7708 MA111
D7706 MA111
R7794 DEL
GJ77
R7780 1K
R7781 33K
D7719 RD6.2ESA B2
D7717 RD6.2ESA B2
D7718
GJ71 DEL.
GJ72 DEL
C7769 0.01
12V
AREA 4
(No use 50H71)
Q771
AN79M12F
-12V
-16V
C7770 25V100u
C7772 50V0.33
RR52 1k
RR54 1k
RR56 1k
RR61 2.2K
RR62 2.2K
RR63 2.2K
RR53 470
RR55 470
RR57 470
QR14 KTA1504Y
QR15 KTA1504Y
QR16 KTA1504Y
100 R7893
GJ711
GJ712 DEL.
GJ710
C7812 0.01
GJ75 DEL.
GJ76 DEL.
P709 BB15P
P708 BB15P
+5V-3 GND SDAM SCLM SDAU SCLU I2CS YS B G R GND +12V -12V ACSY
BH GV GH RV RH BV GND WCK NC ADCK VD HD -5V GND +5V-3
DIGTAL-CONVER
PD0078
(PH002)
(PH001)
GJ73 DEL.
GJ74 DEL.
R7907 22K
KTC3875Y
R7908 4.7K
D7730 DEL
C7704 25V100u
R7798 4.7k
C7776 50V1.0u
R7762 10K
C7702 50V0.33
R7761 33K
Q752 STK392-110
Q766 KTC3875Y
D7716 MA111
R7777 33k
R7778 4.7K
C7735 100/50V
C7732 330p
KTC3875Y Q796
R7880 RM73B1H221J
R7887 10k
R7882 10k
R7881 4.7k
R7883 10k
R7885 15k
D7806

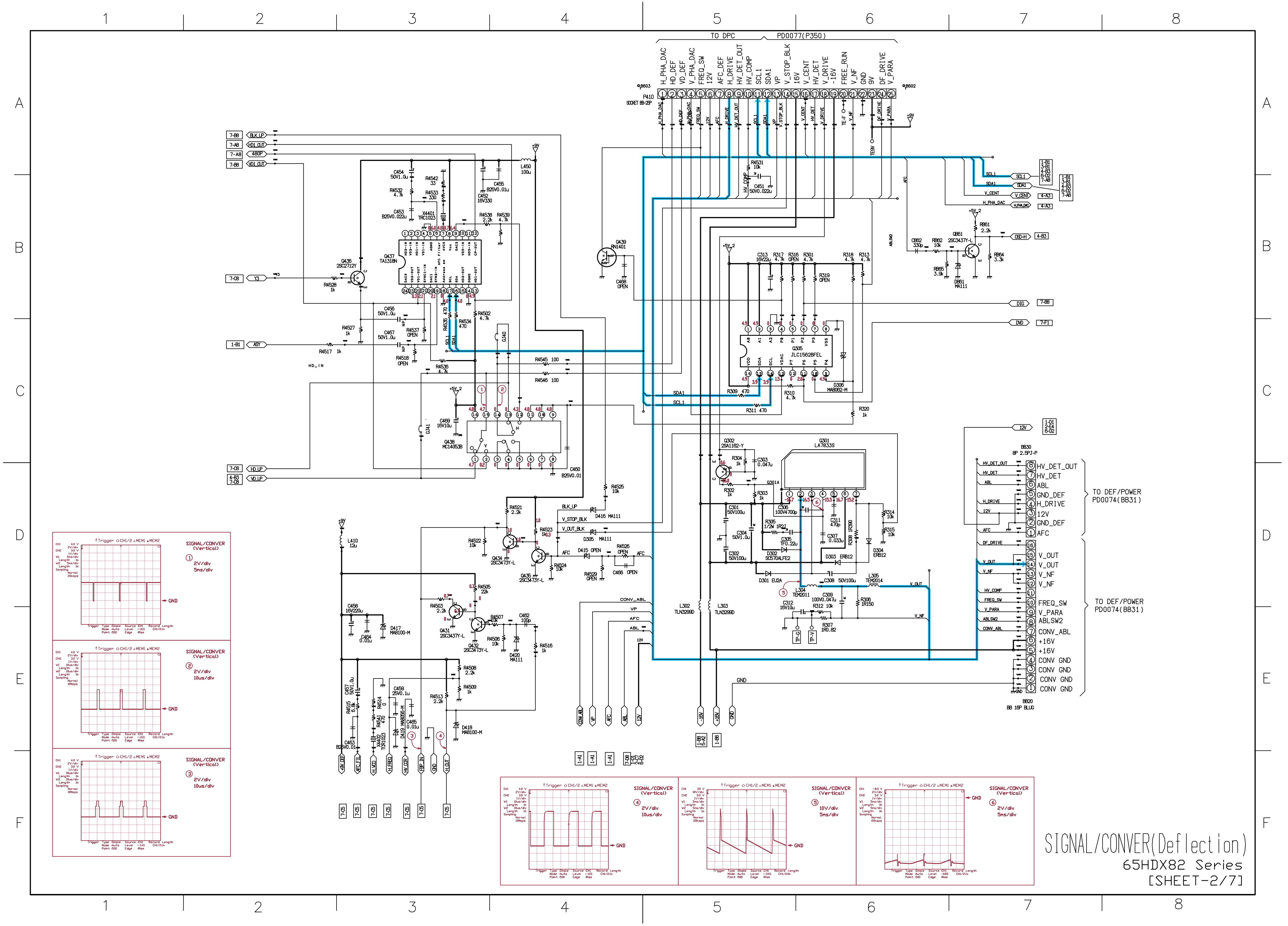

5
6
7
8
A
B
C
D
E
F
Tek Run: 2.50MS/s PK Detect
Q792
⑨
② PIN
⑫ PIN
Tek Run: 5.00kS/s PK Detect
Q783
⑤
Drain
Ver. sync
Tek Run: 5.00kS/s PK Detect
Q793
⑥
Drain
Ver. sync
R7909
4.7K
KTC3875Y
Q788
D7809
MA111
C7821
DEL
PROTECT
BB10 10pin
PROTECT
5-A2
+5V_2
+5V_2
1-A1
5-A1
6-A2
+11V
5-A2
6-C8
7-C2
+7V
5-A2
L7710
TLN3441AT
+16V
2-E5
GND
L7711
TLN3441AT
-16V
2-E5
5-A2
L7713
TLN3274D
-32V
5-A2
GND
+32V_A
5-A2
L7712
TLN3274D
Q782
AN79M05F
-5V
C7706
50V0.33
4.7k R7843
L7708
TEM2011
D7807
RL4Z
C7797
25V470
C7818 1000P
C7795
B25V0.022
C7822
63V1.0
Q783
2SJ512
Q783A
C7817
3300P
R7899
220
R7841
D7734
RD18MB2
R7842
R7897
10k
C7796
50V220u
R7862
R7898
4.7k
Q781
KTC3875Y
C7794
50V0.1
Q780
KTA1504Y
Q779
KTC3875Y
C7780
470p
R7836
4.7k
R7861
4.7k
C7815
50V0.022u
R7849 1/8W1k
R7845 1/8W1k
L7709
TEM2011
D7808
RU2YX
C7791
25V470
C7819 1000P
C7792 4700P
Q793
FET 2SK2920
C7820
3300P
C7793
50V0.1
R7837
R7896
220
R7844
R7895
10k
C7798
50V220u
R7848
4.7k
D7733
RD18MB2
R7894
4.7k
Q778
KTC3875Y
Q776
KTC3875Y
C7783
470p
Q777
KTA1504Y
R7847
10k
R7846
10k
R7797
4.7K
R7798
4.7k
Q772
KTA1504Y
R7760
10K
R7799
2.2K
Q773
KTC3875Y
D7702
1SS133
C7703
4700P
R7914
1/2R1.8k
Q751 STK392-110
B-H
G-H
R-H
B-V
G-V
R-V
Q752A
Q751A
C7714
C7715
C7717
C7716
C7718
C7719
C7736
100/50V
C7766
25V330u
C7738
330P
C7741
330P
C7733
330P
R7722
4.7k
R7728
R7731
1RF1.8
R7730
2R220
R7890
470
R7735
2R220
R7733
R7727
R7736
1RF1.8
R7732
4.7K
C7740
330p
C7737
1000P
R7891
470
R7723
R7726
1RF1.8
R7725
2R220
D7746
D7745
D7747
D7748
D7749
D7760
MA111
Q765
KTC3875Y
D7715
MA111
R7775
33k
R7776
4.7K
C7725
100/50V
C7724
100/50V
C7721
1000P
R7707
4.7k
C7708
C7709
15P
C7727
330P
R7713
4.7k
R7716
1RF1.8
R7715
2R220
D7739
D7738
C7711
C7710
D7740
D7741
C7730
330P
R7718
R7712
C7726
1000P
R7720
2R220
R7721
1RF1.8
C7729
1000P
C7713
C7712
D7742
D7743
C7722
330P
R7708
4.7k
R7710
2R220
R7717
4.7k
R7711
1RF1.8
P713
JACK
RED
GREEN
P714
JACK
BLUE
P715 JACK
+5V_2
R7884
10k
R7887
10k
R7886
220k
Q797
TA75S393F(TE85L)
-5V
R7885
15k
C792
50V2.2u
R7889
Q799
R7888
Q798
Vdd
Vss
Tek Run: 5.00kS/s PK Detect
Q752
③
⑥ PIN Blue
⑭ PIN Green
⑮ PIN Red
Ver. sync
Tek Run: 5.00kS/s PK Detect
Q751
①
⑥ PIN Blue
⑭ PIN Green
⑮ PIN Red
Ver. sync
Tek Run: 5.00kS/s PK Detect
Q751
②
⑨ PIN Blue
⑪ PIN Green
⑱ PIN Red
Ver. sync
Tek Run: 5.00kS/s PK Detect
Q752
④
⑨ PIN Blue
⑪ PIN Green
⑱ PIN Red
Ver. sync

MODEL \ ITEM	R7889	R7888
42H81/43H71/43HX71 53H71/53HX71 50H71/50H81/50HX81	18K	18K
57H81/57HX81/61H71 65H81/65HX81	33K	33K

SIGNAL/CONVER (Conver)

65HDX82 Series

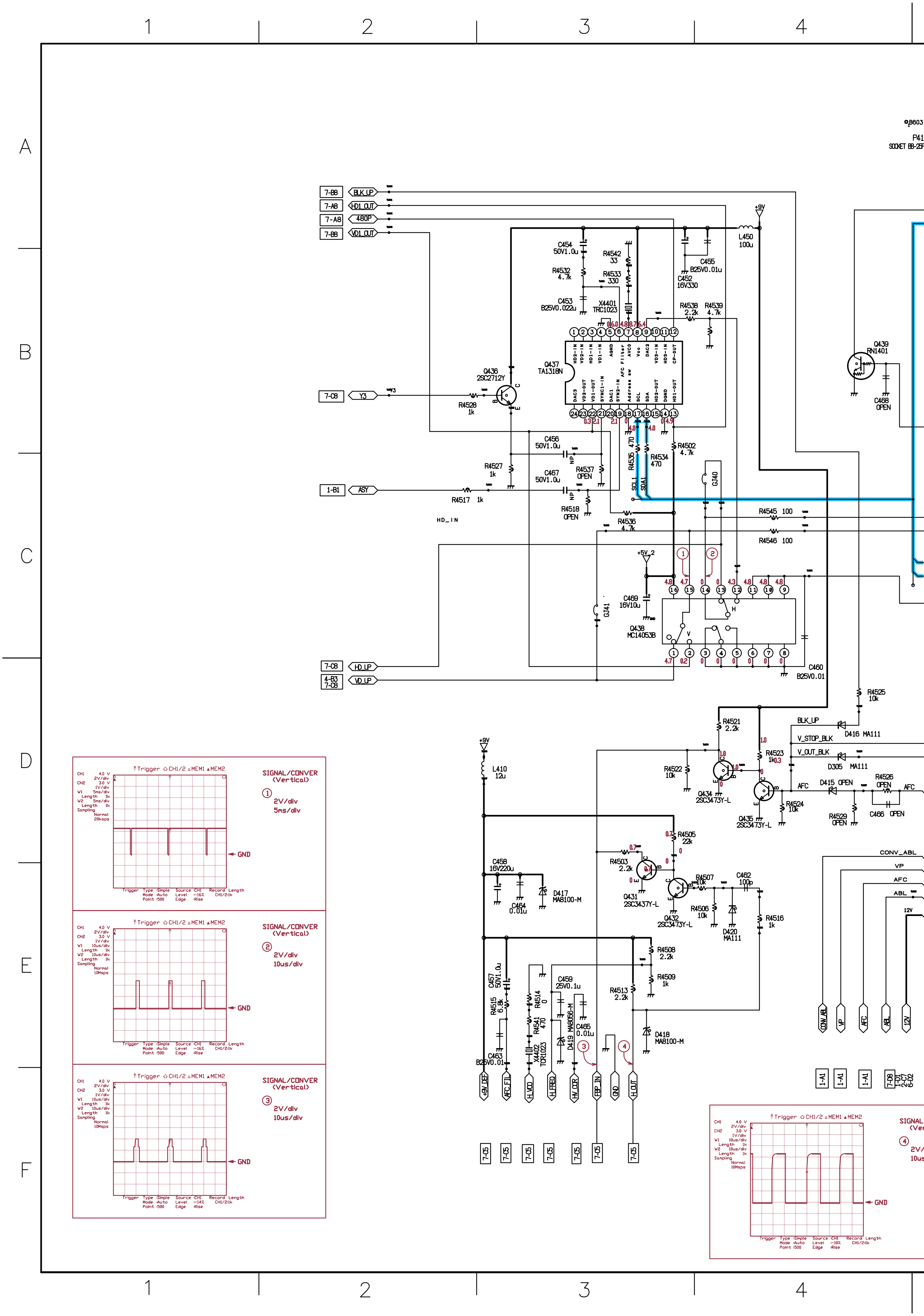
[SHEET-1/7]


TO DPC
PD0077(P350)
H_PHA_DAC
HD_DEF
VD_DEF
V_PHA_DAC
FREQ_SW
12V
AFC_DEF
H_DRIVE
HV_DET_OUT
HV_COMP
SCL1
SDA1
VP
V_STOP_BLK
16V
V_CENT
HV_DET
V_DRIVE
-16V
FREE_RUN
V_NF
GND
9V
DF_DRIVE
V_PARA
P410
SOCKET BB-25P
BLK_UP
HD1_OUT
480P
VD1_OUT
Y3
ASY
HD_UP
VD_UP
DIG
DVD
Q437
TA1318N
Q436
2SC2712Y
Q438
MC14053B
Q439
RN1401
Q305
JLC1562BFEL
Q302
2SA1162-Y
Q301
LA7833S
Q861
2SC3437Y-L
Q434
2SC3473Y-L
Q435
2SC3473Y-L
Q431
2SC3437Y-L
Q432
2SC3473Y-L
L450
100u
L410
12u
L302
TLN3299D
L303
TLN3299D
L304
TEM2011
L305
TEM2014
OSD-H
BB30
8P 2.5PJ-P
HV_DET_OUT
HV_DET
ABL
GND_DEF
H_DRIVE
12V
GND_DEF
AFC
TO DEF/POWER
PD0074(BB31)
V_OUT
V_OUT
V_NF
V_NF
FREQ_SW
V_PARA
ABLSW2
CONV_ABL
+16V
+16V
CONV GND
CONV GND
CONV GND
CONV GND
TO DEF/POWER
PD0074(BB31)
BB20
BB 16P BLUG
SIGNAL/CONVER
(Vertical)
① 2V/div 5ms/div
② 2V/div 10us/div
③ 2V/div 10us/div
④ 2V/div 10us/div
⑤ 10V/div 5ms/div
⑥ 2V/div 5ms/div
GND

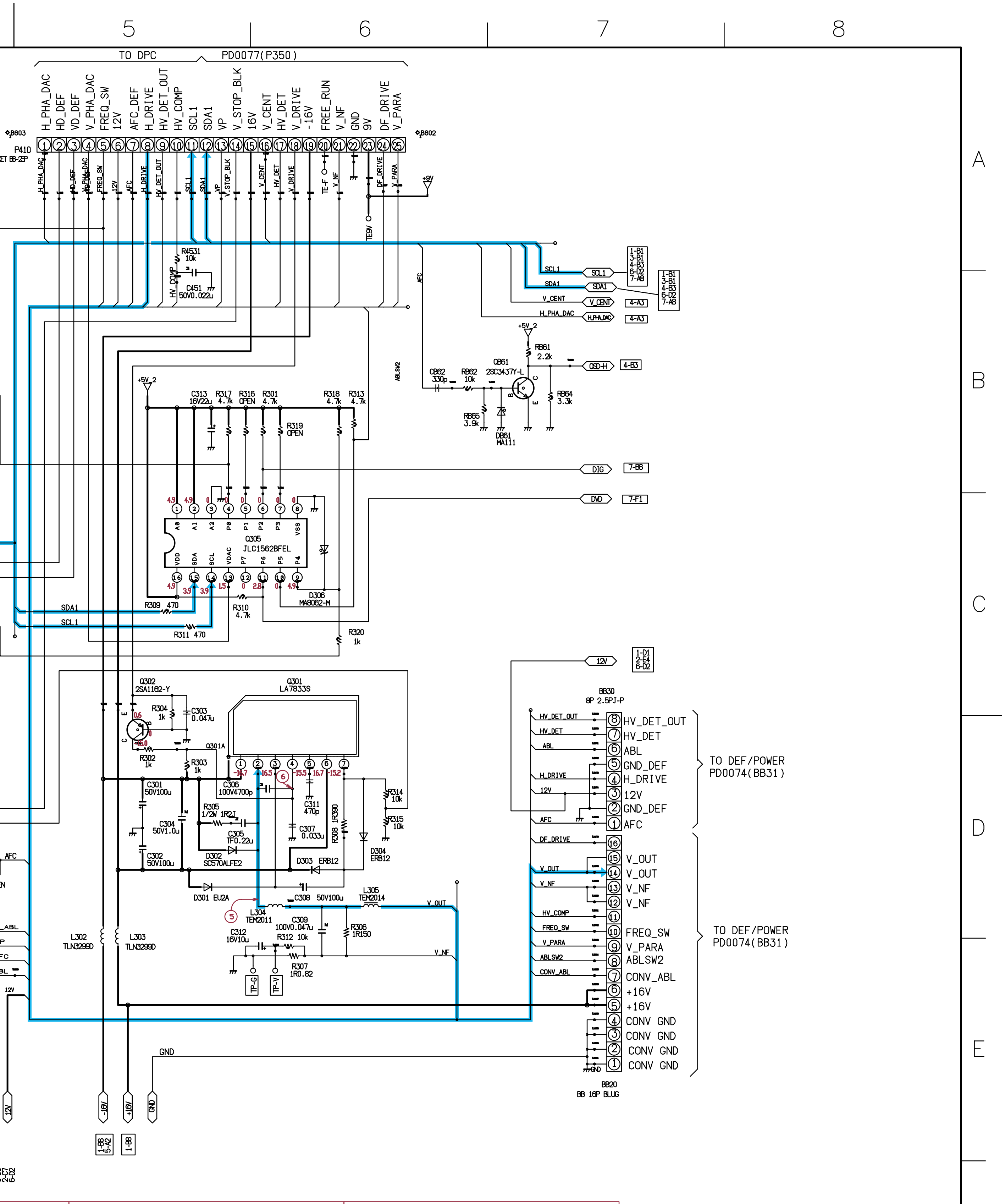
SIGNAL/CONVER(Deflection)

65HDX82 Series

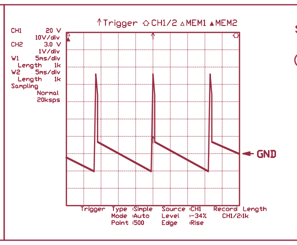
[SHEET-2/7]



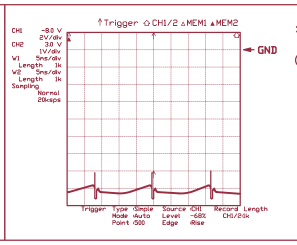
1
2
3
4
A
B
C
D
E
F
B603
P41
SOCKET BB-2F
7-B8
BLK UP
7-A8
HD1 OUT
7-A8
480P
7-B8
VD1 OUT
+9V
L450
100u
C454
50V1.0u
R4542
33
R4532
4.7k
R4533
330
C455
B25V0.01u
C452
16V330
C453
B25V0.022u
X4401
TRC1023
R4538
2.2k
R4539
4.7k
HD2-IN
VD2-IN
HD1-IN
VD1-IN
AGND
AFC Filter
AVCO
Vcc
DAC2
VD3-IN
HD3-IN
CP-OUT
DAC3
VD2-OUT
VD1-OUT
SYNC1-IN
DAC1
SYNC2-IN
Address sw
SCL
SDA
HD2-OUT
DGND
HD1-OUT
Q437
TA1318N
Q436
2SC2712Y
Q439
RN1401
C468
OPEN
7-C8
Y3
R4528
1k
R4502
4.7k
R4535
470
R4534
470
C456
50V1.0u
R4527
1k
C467
50V1.0u
R4537
OPEN
SCL1
SDA1
GJ40
1-B1
ASY
R4517
1k
R4518
OPEN
HD_IN
R4536
4.7k
R4545 100
R4546 100
+5V_2
C469
16V10u
GJ41
Q438
MC14053B
H
V
7-C8
HD UP
4-B3
7-C8
VD UP
C460
B25V0.01
R4525
10k
R4521
2.2k
BLK_UP
D416 MA111
V_STOP_BLK
V_OUT_BLK
D305 MA111
R4523
1k
R4522
10k
Q434
2SC3473Y-L
AFC
D415 OPEN
R4526
OPEN
R4524
10k
R4529
OPEN
C466 OPEN
Q435
2SC3473Y-L
+9V
L410
12u
R4505
22k
R4503
2.2k
Q431
2SC3437Y-L
R4507
10k
C462
100p
C458
16V220u
C464
0.01u
D417
MA8100-M
R4506
10k
Q432
2SC3473Y-L
D420
MA111
R4516
1k
CONV_ABL
VP
AFC
ABL
12V
R4508
2.2k
R4509
1k
R4513
2.2k
C457
50V1.0u
R4515
6.8k
R4514
0
C459
25V0.1u
R4541
470
X4402
TCR1023
D419 MA8056-M
C465
0.01u
D418
MA8100-M
C463
B25V0.01
+9V_DEF
AFC_FIL
H_VCO
H_FREQ
HV_COR
FBP_IN
GND
H_OUT
CONV_ABL
VP
AFC
ABL
12V
1-A1
1-A1
1-A1
7-D8
1-D1
2-C7
6-D2
7-C5
7-C5
7-C5
7-C5
7-C5
7-C5
7-C5
↑Trigger ◇CH1/2 △MEM1 ▲MEM2
CH1 4.0 V 2V/div
CH2 3.0 V 1V/div
W1 5ms/div Length 1k
W2 5ms/div Length 1k
Sampling Normal 20ksps
SIGNAL/CONVER (Vertical)
① 2V/div 5ms/div
GND
Trigger Type Simple Mode Auto Point 500
Source CH1 Level -16% Edge Rise
Record Length CH1/2:1k
↑Trigger ◇CH1/2 △MEM1 ▲MEM2
CH1 4.0 V 2V/div
CH2 3.0 V 1V/div
W1 10us/div Length 1k
W2 10us/div Length 1k
Sampling Normal 10Msps
SIGNAL/CONVER (Vertical)
② 2V/div 10us/div
GND
Trigger Type Simple Mode Auto Point 500
Source CH1 Level -16% Edge Rise
Record Length CH1/2:1k
↑Trigger ◇CH1/2 △MEM1 ▲MEM2
CH1 4.0 V 2V/div
CH2 3.0 V 1V/div
W1 10us/div Length 1k
W2 10us/div Length 1k
Sampling Normal 10Msps
SIGNAL/CONVER (Vertical)
③ 2V/div 10us/div
GND
Trigger Type Simple Mode Auto Point 500
Source CH1 Level -14% Edge Rise
Record Length CH1/2:1k
↑Trigger ◇CH1/2 △MEM1 ▲MEM2
CH1 4.0 V 2V/div
CH2 3.0 V 1V/div
W1 10us/div Length 1k
W2 10us/div Length 1k
Sampling Normal 10Msps
SIGNAL (Ver
④ 2V/ 10us
GND
Trigger Type Simple Mode Auto Point 500
Source CH1 Level -10% Edge Rise
Record Length CH1/2:1k


5
6
7
8
A
B
C
D
E
F
TO DPC
PD0077(P350)
H_PHA_DAC
HD_DEF
VD_DEF
V_PHA_DAC
FREQ_SW
12V
AFC_DEF
H_DRIVE
HV_DET_OUT
HV_COMP
SCL1
SDA1
VP
V_STOP_BLK
16V
V_CENT
HV_DET
V_DRIVE
-16V
FREE_RUN
V_NF
GND
9V
DF_DRIVE
V_PARA
P410
B603
B602
+9V
TE-F
TE9V
R4531 10k
C451 50V0.022u
HV_COMP
AFC
SCL1
SDA1
V_CENT
H_PHA_DAC
1-B1 3-B1 4-B3 6-D2 7-A8
4-A3
+5V_2
RB61 2.2k
QB61 2SC3437Y-L
OSD-H
4-B3
CB62 330p
RB62 10k
RB64 3.3k
RB65 3.9k
DB61 MA111
ABLSW2
C313 16V22u
R317 4.7k
R316 OPEN
R301 4.7k
R318 4.7k
R313 4.7k
R319 OPEN
DIG
7-B8
DVD
7-F1
Q305 JLC1562BFEL
A0 A1 A2 P0 P1 P2 P3 VSS
VDD SDA SCL VDAC P7 P6 P5 P4
D306 MA8062-M
R309 470
R311 470
R310 4.7k
R320 1k
12V
1-D1 2-E4 6-D2
Q302 2SA1162-Y
R304 1k
C303 0.047u
R302 1k
R303 1k
Q301 LA7833S
Q301A
C301 50V100u
C304 50V1.0u
C302 50V100u
R305 1/2W 1R2J
C305 TF0.22u
C306 100V4700p
C311 470p
C307 0.033u
R308 1R390
R314 10k
R315 10k
D304 ERB12
D303 ERB12
D302 SC570ALFE2
D301 EU2A
L304 TEM2011
C308 50V100u
L305 TEM2014
V_OUT
C309 100V0.047u
R306 1R150
C312 16V10u
R312 10k
R307 1R0.82
V_NF
TP-G
TP-V
L302 TLN3299D
L303 TLN3299D
BB30 8P 2.5PJ-P
HV_DET_OUT
HV_DET
ABL
GND_DEF
H_DRIVE
12V
AFC
TO DEF/POWER PD0074(BB31)
DF_DRIVE
V_OUT
V_NF
HV_COMP
FREQ_SW
V_PARA
ABLSW2
CONV_ABL
+16V
CONV GND
BB20 BB 16P BLUG
GND
-16V
+16V
1-B8 5-A2
1-B8

SIGNAL/CONVER (Vertical)
④
2V/div
10us/div

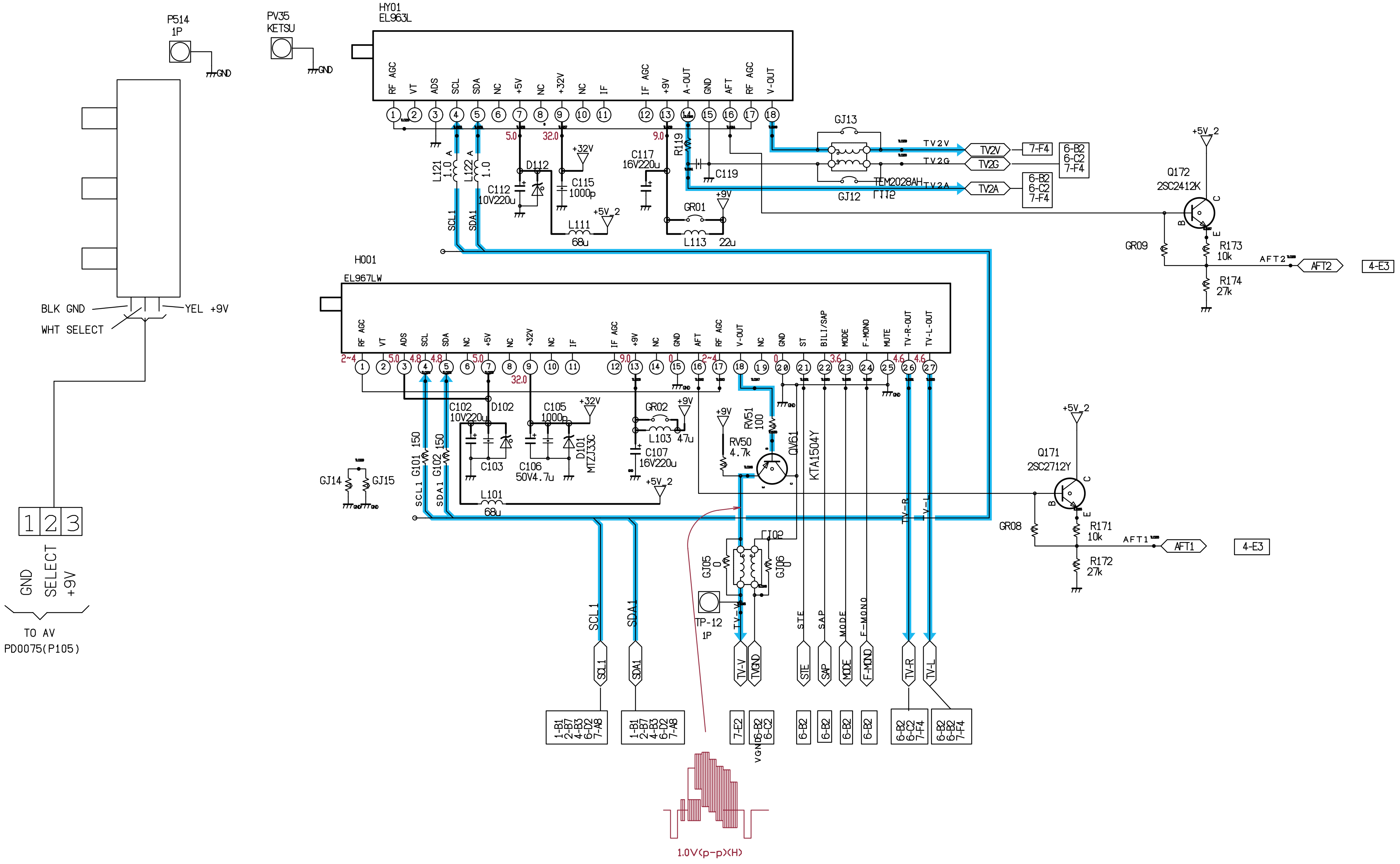


SIGNAL/CONVER (Vertical)
⑤
10V/div
5ms/div



SIGNAL/CONVER (Vertical)
⑥
2V/div
5ms/div

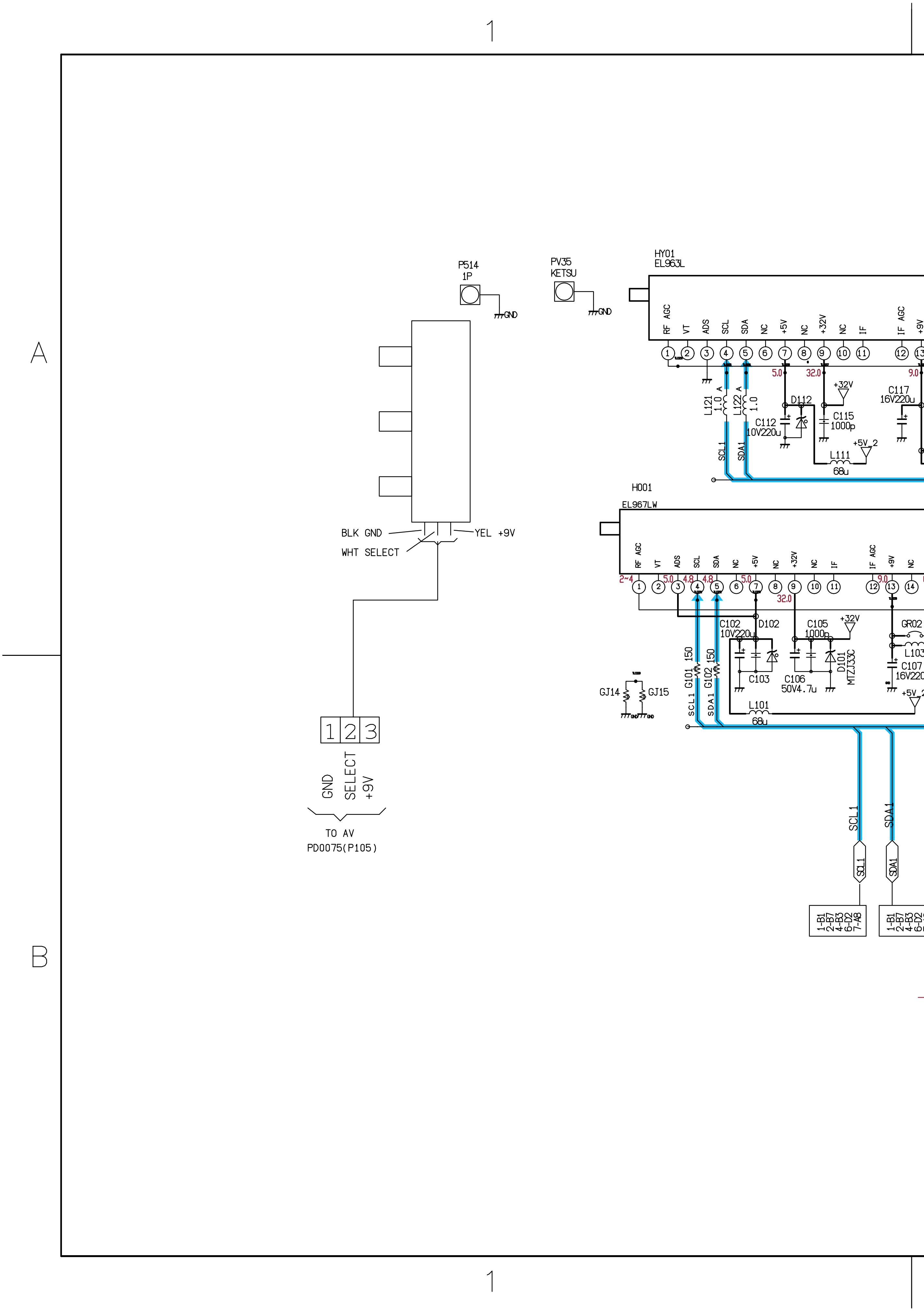
SIGNAL/CONVER(Deflection)
65HDX82 Series
[SHEET-2/7]


P514
1P
PV35
KETSU
GND
HY01
EL963L
RF AGC
VT
ADS
SCL
SDA
NC
+5V
+32V
IF
IF AGC
+9V
A-OUT
GND
AFT
V-OUT
GJ13
TV2V
TV2G
TV2A
TEM2028AH
GJ12
7-F4
6-B2
6-C2
L121 1.0
L122 1.0
C112 10V220u
D112
C115 1000p
L111 68u
C117 16V220u
R119
C119
GR01
L113 22u
+5V_2
Q172
2SC2412K
GR09
R173 10k
R174 27k
AFT2
4-E3
H001
EL967LW
BILI/SAP
ST
MODE
F-MONO
MUTE
TV-R-OUT
TV-L-OUT
G101 150
G102 150
GJ14
GJ15
C102 10V220u
D102
C103
C105 1000p
C106 50V4.7u
D101 MTZJ33C
L101 68u
GR02
L103 47u
C107 16V220u
RV50 4.7k
RV51 100
QV61
KTA1504Y
GJ05
GJ06
TP-12 1P
Q171
2SC2712Y
GR08
R171 10k
R172 27k
AFT1
BLK GND
WHT SELECT
YEL +9V
1 2 3
GND
SELECT
+9V
TO AV
PD0075(P105)
SCL1
SDA1
TV-V
TVGND
STE
SAP
MODE
F-MONO
TV-R
TV-L
1-B1
2-B7
4-B3
6-D2
7-A8
7-E2
1.0V(p-p)(H)

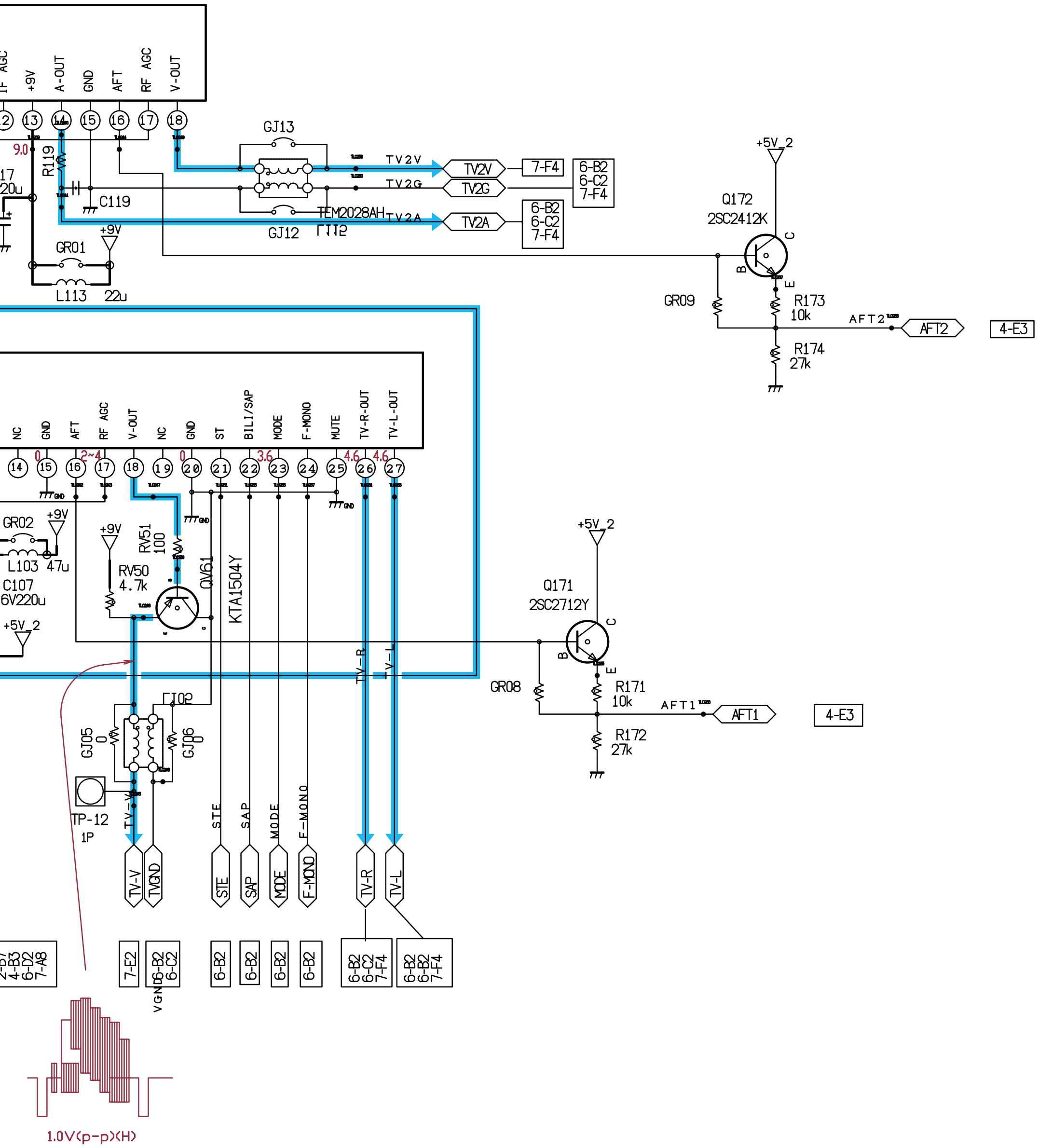
SIGNAL/CONVER(If)

65HDX82 Series

[SHEET-3/7]


1
A
B
P514
1P
GND
PV35
KETSU
GND
HY01
EL963L
RF AGC
VT
ADS
SCL
SDA
NC
+5V
NC
+32V
NC
IF
IF AGC
+9V
5.0
32.0
9.0
+32V
C117
16V220u
L121
1.0 A
L122
1.0 A
D112
C112
10V220u
C115
1000p
+5V_2
L111
68u
SCL1
SDA1
H001
EL967LW
BLK GND
YEL +9V
WHT SELECT
2~4
5.0
4.8
4.8
5.0
32.0
9.0
C102
10V220u
D102
C105
1000p
+32V
GR02
L103
C107
16V220
G101 150
G102 150
C103
C106
50V4.7u
D101
MTZJ33C
GJ14
GJ15
L101
68u
+5V_2
1 2 3
GND
SELECT
+9V
TO AV
PD0075(P105)
SCL1
SDA1
SCL1
SDA1
1-B1
2-B7
4-B3
6-D2
7-A8
1-B1
2-B7
4-B3
6-D2

A

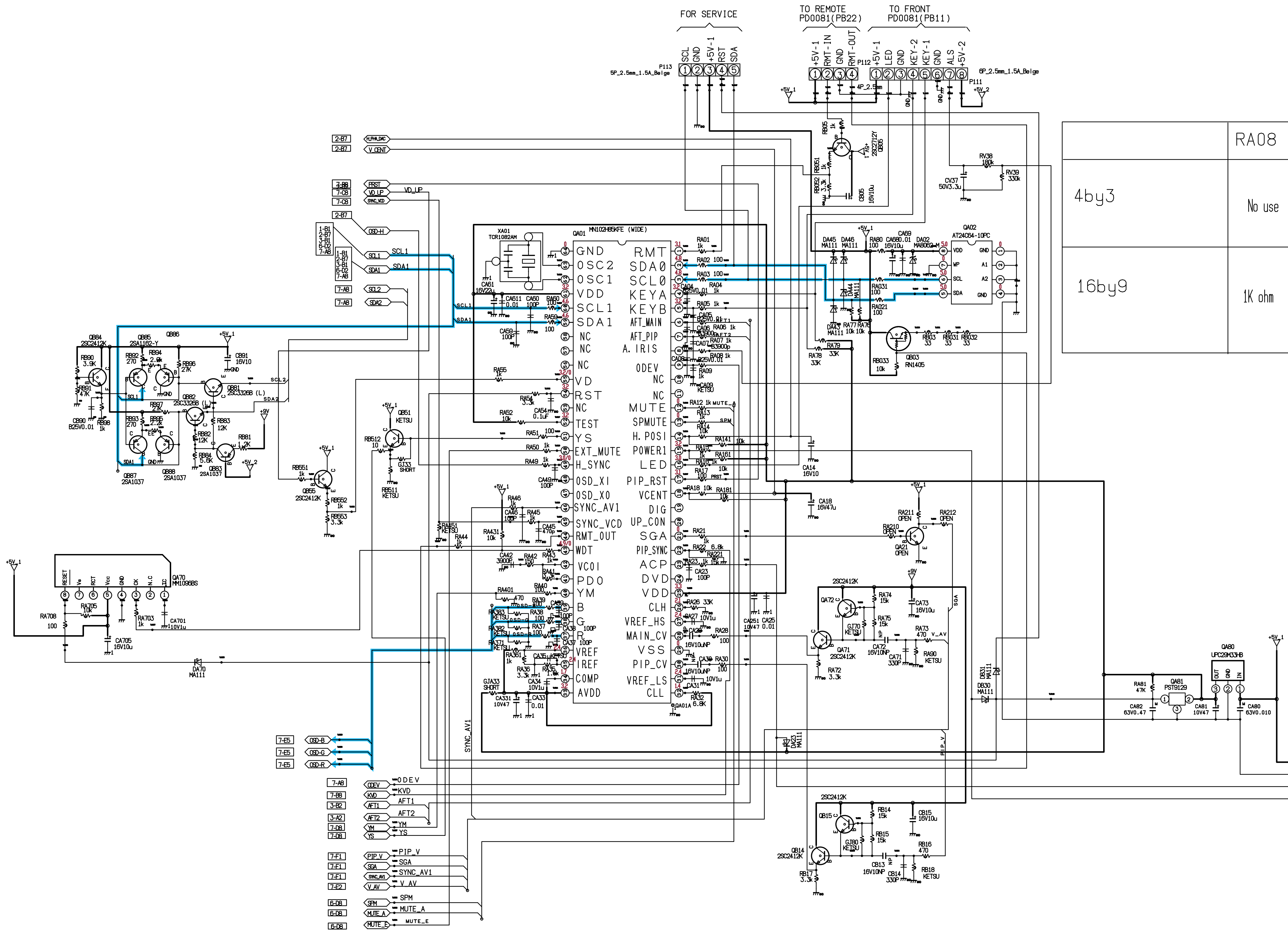

IF AGC
+9V
A-OUT
GND
AFT
RF AGC
V-OUT
12
13
14
15
16
17
18
9.0
R119
17
20u
C119
GJ13
GJ12
TEM2028AH
T112
TV2V
TV2G
TV2A
7-F4
6-B2
6-C2
7-F4
6-B2
6-C2
7-F4
+9V
GR01
L113
22u
+5V_2
Q172
2SC2412K
B
C
E
GR09
R173
10k
AFT2
4-E3
R174
27k
NC
GND
AFT
RF AGC
V-OUT
NC
GND
ST
BILI/SAP
MODE
F-MONO
MUTE
TV-R-OUT
TV-L-OUT
0
2~4
0
3.6
4.6
4.6
14
15
16
17
18
19
20
21
22
23
24
25
26
27
GND
GR02
+9V
L103
47u
C107
6V220u
+5V_2
+9V
RV51
100
RV50
4.7k
QV61
KTA1504Y
+5V_2
Q171
2SC2712Y
B
C
E
GR08
R171
10k
AFT1
4-E3
R172
27k
TV-R
TV-L
CI02
GJ05
0
GJ06
0
TP-12
1P
TV-V
STE
SAP
MODE
F-MONO
TV-V
TVGND
STE
SAP
MODE
F-MONO
TV-R
TV-L
2-B7
4-B3
6-D2
7-A8
7-E2
6-B2
6-C2
VGND
6-B2
6-B2
6-B2
6-B2
6-B2
6-C2
7-F4
6-B2
6-B2
7-F4
1.0V(p-p)(H)

B

SIGNAL/CONVER(If)

65HDX82 Series

[SHEET-3/7]

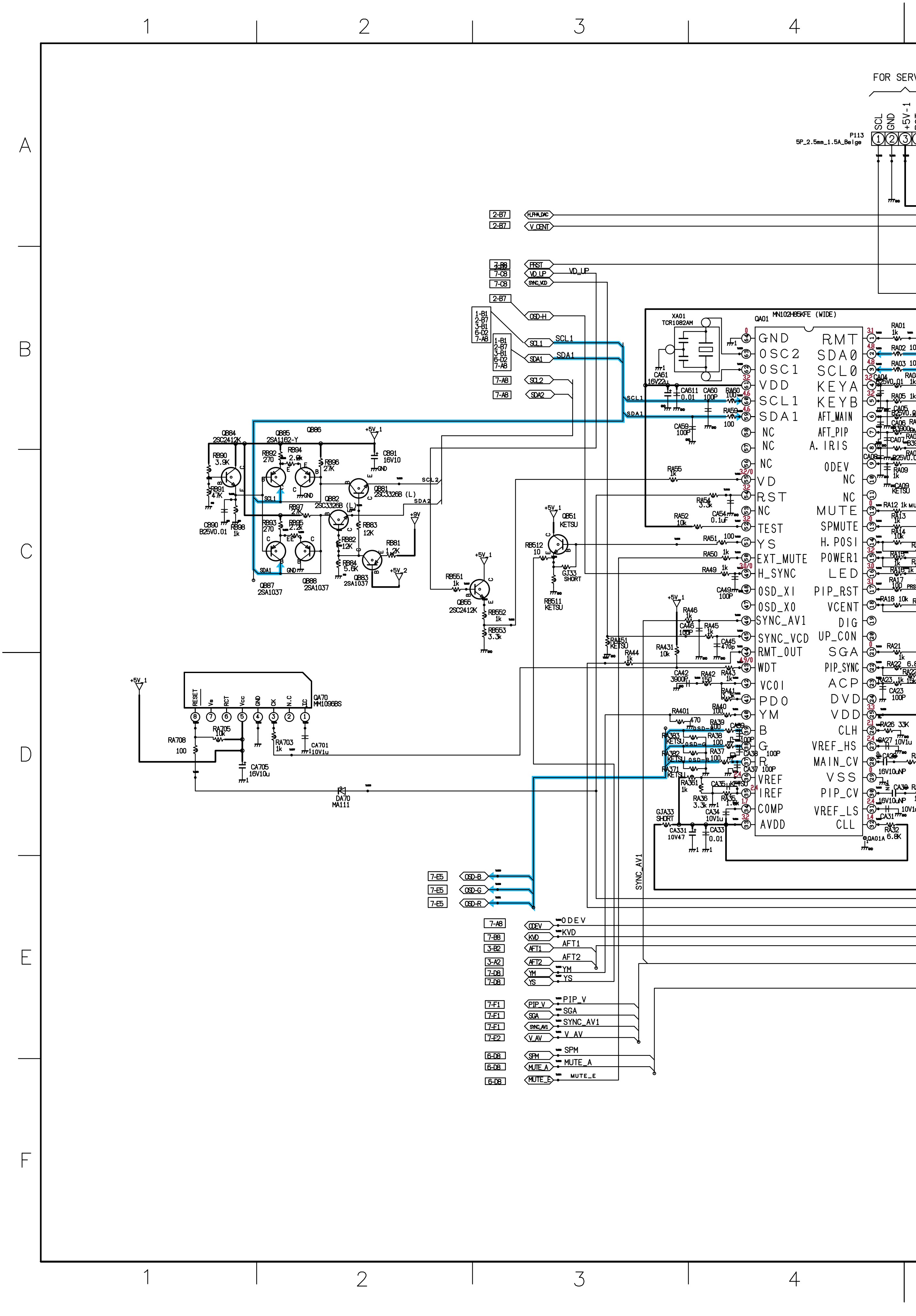

FOR SERVICE
P113
5P_2.5mm_1.5A_Beige
SCL
GND
+5V-1
RST
SDA
TO REMOTE
PD0081(PB22)
+5V-1
RMT-IN
GND
RMT-OUT
P112
4P_2.5mm
TO FRONT
PD0081(PB11)
+5V-1
LED
GND
KEY-2
KEY-1
GND
ALS
+5V-2
P111
6P_2.5mm_1.5A_Beige
QA01
MN102H65KFE (WIDE)
XA01
TCR1082AH
GND
OSC2
OSC1
VDD
SCL1
SDA1
NC
NC
NC
VD
RST
NC
TEST
YS
EXT_MUTE
H_SYNC
OSD_XI
OSD_XO
SYNC_AV1
SYNC_VCD
RMT_OUT
WDT
VCO1
PD0
YM
B
G
R
VREF
IREF
COMP
AVDD
RMT
SDA0
SCL0
KEYA
KEYB
AFT_MAIN
AFT_PIP
A. IRIS
ODEV
NC
NC
MUTE
SPMUTE
H. POSI
POWER1
LED
PIP_RST
VCENT
DIG
UP_CON
SGA
PIP_SYNC
ACP
DVD
VDD
CLH
VREF_HS
MAIN_CV
VSS
PIP_CV
VREF_LS
CLL
QA02
AT24C64-10PC
VDD
WP
SCL
SDA
A1
A2
GND
QA70
MN1096BS
RESET
Vo
RCT
Vcc
GND
CK
N.C
CE
QA80
UPC29M33HB
OUT
GND
IN
QA81
PST9129
QB84
2SC2412K
QB85
2SA1162-Y
QB86
QB81
2SC3326B (L)
QB82
2SC3326B (L)
QB83
2SA1037
QB87
2SA1037
QB88
2SA1037
QB51
KETSU
QB55
2SC2412K
QB05
2SC2712Y
QB03
RN1405
QA21
OPEN
QA72
2SC2412K
QA71
2SC2412K
QB15
2SC2412K
QB14
2SC2412K
DA70
MA111
DA45
MA111
DA46
MA111
DA02
MA8062-M
DB30
MA111
DB31
MA111
2-B7
ALPHA_DAC
V_CENT
RST
VD_UP
SYNC_VCD
VD_UP
OSD-H
SCL1
SDA1
SCL2
SDA2
7-E5
OSD-B
OSD-G
OSD-R
ODEV
KVD
AFT1
AFT2
YM
YS
PIP_V
SGA
SYNC_AV1
V_AV
SPM
MUTE_A
MUTE_E
+5V_1
GND
ACP
POWER1
1-B1
5-A2
+5V_1
+5V_2
+9V
SYNC_AV1
PIP_V
SGA
V_AV

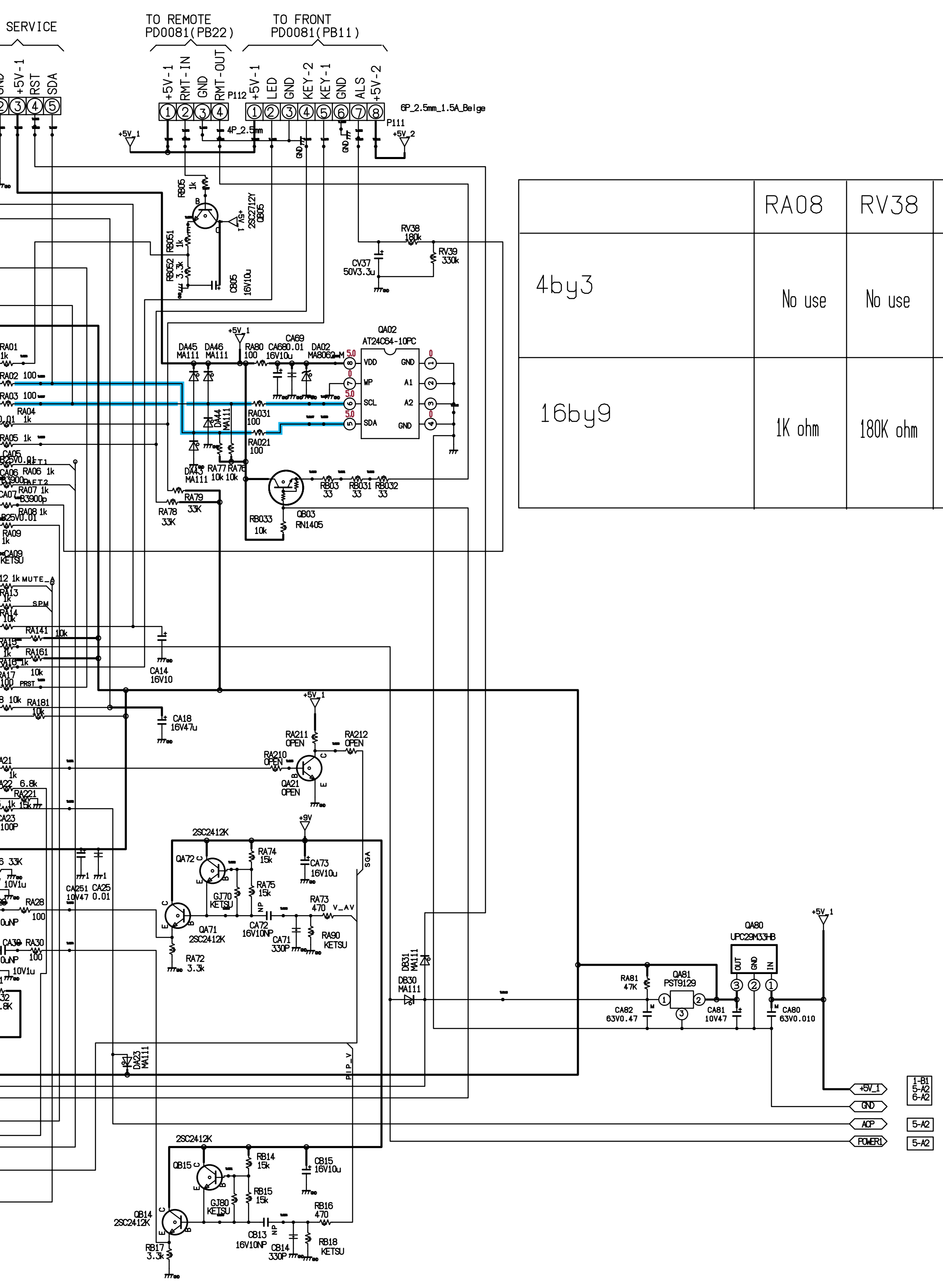
	RA08	RV38	RV39	CV37
4by3	No use	No use	No use	No use
16by9	1K ohm	180K ohm	330K ohm	50V3.3uF

SIGNAL/CONVER(Maicon)

65HDX82 Series

[SHEET-4/7]


1
2
3
4
A
B
C
D
E
F
FOR SERV
P113
5P_2.5mm_1.5A_Beige
SCL
GND
+5V-1
2-B7
2-B7
H.PHA_DAC
V_CENT
7-B8
7-C8
7-C8
FRST
VD_UP
SYNC_VCD
2-B7
OSD-H
1-B1
2-B7
3-B1
6-D2
7-A8
SCL1
SDA1
7-A8
7-A8
SCL2
SDA2
XA01
TCR1082AM
QA01
MN102H55KFE (WIDE)
CA61
16V22u
CA611
0.01
CA60
100P
RA60
100
RA59
100
CA59
100P
GND
OSC2
OSC1
VDD
SCL1
SDA1
NC
NC
NC
VD
RST
NC
TEST
YS
EXT_MUTE
H_SYNC
OSD_XI
OSD_XO
SYNC_AV1
SYNC_VCD
RMT_OUT
WDT
VCOI
PDO
YM
B
G
R
VREF
IREF
COMP
AVDD
RMT
SDA0
SCL0
KEYA
KEYB
AFT_MAIN
AFT_PIP
A. IRIS
ODEV
NC
NC
MUTE
SPMUTE
H. POSI
POWER1
LED
PIP_RST
VCENT
DIG
UP_CON
SGA
PIP_SYNC
ACP
DVD
VDD
CLH
VREF_HS
MAIN_CV
VSS
PIP_CV
VREF_LS
CLL
QA01A
RA01 1k
RA02
RA03
CA04 B25V0.01
RA05 1k
CA05
CA06
CA07
RA09 1k
CA09 KETSU
RA12 1k
RA13
RA14 10K
RA17 100
RA18 10k
RA21 1k
RA22 6.8
RA23 15k
CA23 100P
RA26 33K
CA27 10V1u
16V10uNP
CA30
CA31
RA32 6.8K
RA55 1k
RA54 3.3k
CA54 0.1uF
RA52 10k
RA51 100
RA50 1k
RA49 1k
CA49 100P
RA46 1k
CA46 100P
RA45 1k
CA45 470p
RA451 KETSU
RA431 10k
RA44 1k
RA43 1k
CA42 3900P
RA42 150
RA41
RA40 100
RA401 470
RA39 100
RA383 KETSU
RA38 100
RA382 KETSU
RA37 100
RA371 KETSU
RA361 1k
RA36 3.3k
RA35 1.5k
CA39 100P
CA38 100P
CA37 100P
CA35
CA34 10V1u
GJA33 SHORT
CA331 10V47
CA33 0.01
+5V_1
QB84 2SC2412K
QB85 2SA1162-Y
QB86
RB90 3.9K
RB91 47K
RB92 270
RB94 2.2K
RB96 27K
CB91 16V10
QB81 2SC3326B (L)
QB82 2SC3326B (L)
SCL2
SDA2
RB97 27K
RB93 270
RB95 2.2K
RB83 12K
RB82 12K
RB84 5.6K
RB81 1.2K
+9V
+5V_2
CB90 B25V0.01
RB98 1k
QB87 2SA1037
QB88 2SA1037
QB83 2SA1037
SCL1
SDA1
GND
QB51 KETSU
RB512 10
GJ33 SHORT
RB511 KETSU
RB551 1k
QB55 2SC2412K
RB552 1k
RB553 3.3k
QA70 MM1096BS
RESET
Vs
RCT
Vcc
GND
CK
N.C
IO
RA705 10k
RA708 100
RA703 1k
CA701 10V1u
CA705 16V10u
DA70 MA111
SYNC_AV1
7-E5
7-E5
7-E5
OSD-B
OSD-G
OSD-R
7-A8
7-B8
3-B2
3-A2
7-D8
7-D8
ODEV
KVD
AFT1
AFT2
YM
YS
7-F1
7-F1
7-F1
7-F2
PIP_V
SGA
SYNC_AV1
V_AV
6-D8
6-D8
6-D8
SPM
MUTE_A
MUTE_E
VD_UP



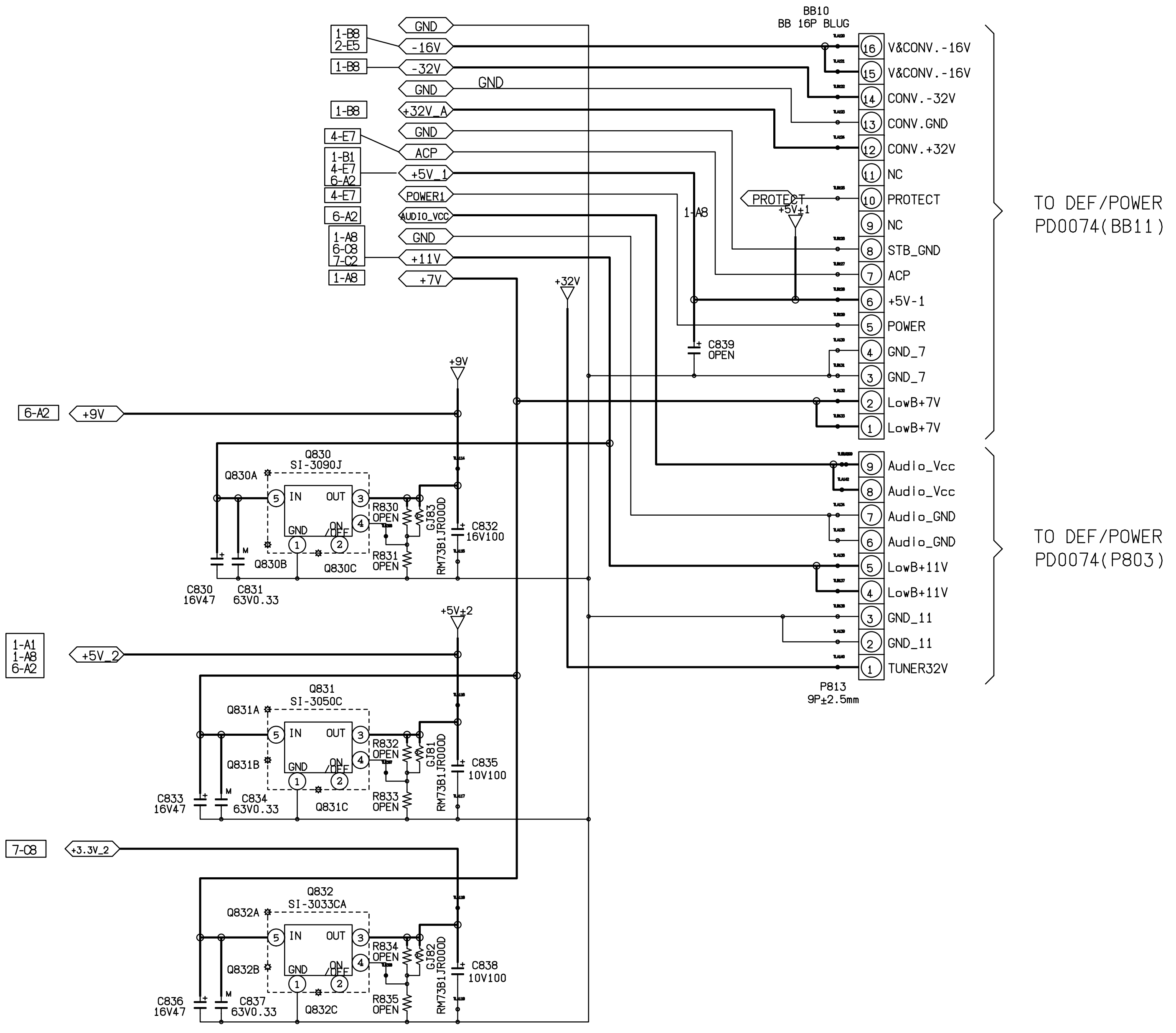
5
6
7
8
A
B
C
D
E
F
SERVICE
+5V-1
RST
SDA
TO REMOTE
PD0081(PB22)
+5V-1
RMT-IN
GND
RMT-OUT
P112
4P_2.5mm
TO FRONT
PD0081(PB11)
+5V-1
LED
GND
KEY-2
KEY-1
GND
ALS
+5V-2
6P_2.5mm_1.5A_Beige
P111
+5V_1
+5V_2
RB05 1k
RB051 1k
RB050 3.3k
2SC2712Y QB05
CB05 16V10u
RV38 180k
RV39 330k
CV37 50V3.3u
QA02
AT24C64-10PC
VDD
WP
SCL
SDA
GND
A1
A2
RA80 100
CA68 16V10u
CA69 0.01
DA02 MA8062-M
DA45 MA111
DA46 MA111
DA44 MA111
DA43 MA111
RA031 100
RA021 100
RA77 10k
RA76 10k
RA78 33K
RA79 33K
RB03 33
RB031 33
RB032 33
RB033 10k
QB03 RN1405
RA01 1k
RA02 100
RA03 100
RA04 1k
RA05 1k
RA06 1k
RA07 1k
RA08 1k
RA09 1k
CA09 KETSU
MUTE_A
SPM
RA13 1k
RA14 10k
RA141 10k
RA161
RA17 100
RA181 10k
CA14 16V10
CA18 16V47u
RA211 OPEN
RA212 OPEN
RA210 OPEN
QA21 OPEN
2SC2412K
QA72
QA71 2SC2412K
RA74 15k
RA75 15k
GJ70 KETSU
CA73 16V10u
RA73 470
V_AV
CA72 16V10NP
CA71 330P
RA90 KETSU
RA72 3.3k
+9V
SGA
CA251 10V47
CA25 0.01
RA28 100
RA30 100
DA23 MA111
PIP_V
DB31 MA111
DB30 MA111
RA81 47K
QA81 PST9129
CA82 63V0.47
CA81 10V47
QA80 UPC29M33HB
OUT
GND
IN
CA80 63V0.010
+5V_1
GND
ACP
POWER1
1-B1
5-A2
6-A2
5-A2
5-A2
QB15
QB14 2SC2412K
RB14 15k
RB15 15k
GJ80 KETSU
CB15 16V10u
RB16 470
CB13 16V10NP
CB14 330P
RB18 KETSU
RB17 3.3k

	RA08	RV38	RV39	CV37
4by3	No use	No use	No use	No use
16by9	1K ohm	180K ohm	330K ohm	50V3.3uF

SIGNAL/CONVER(Maicon)

65HDX82 Series

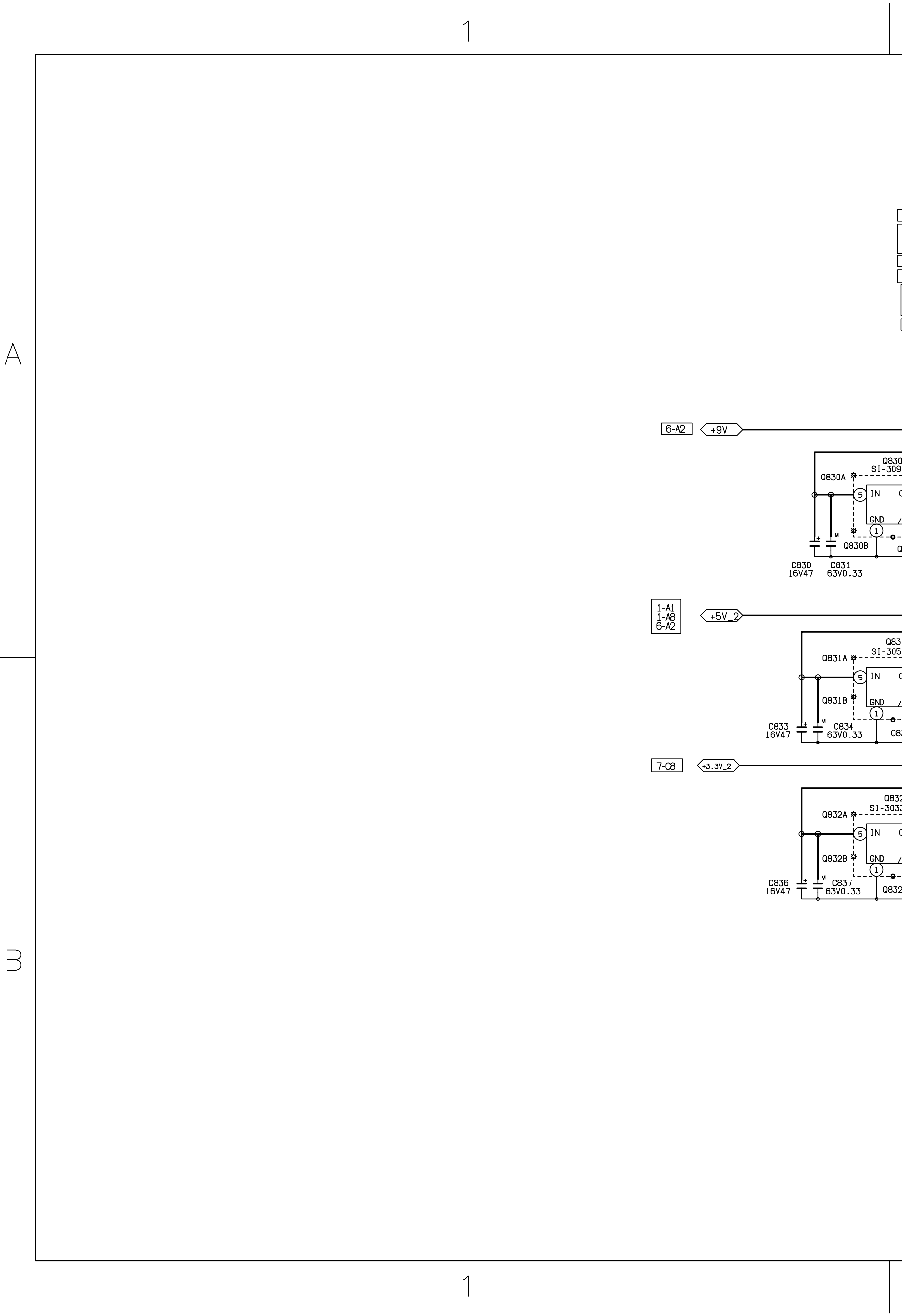
[SHEET-4/7]

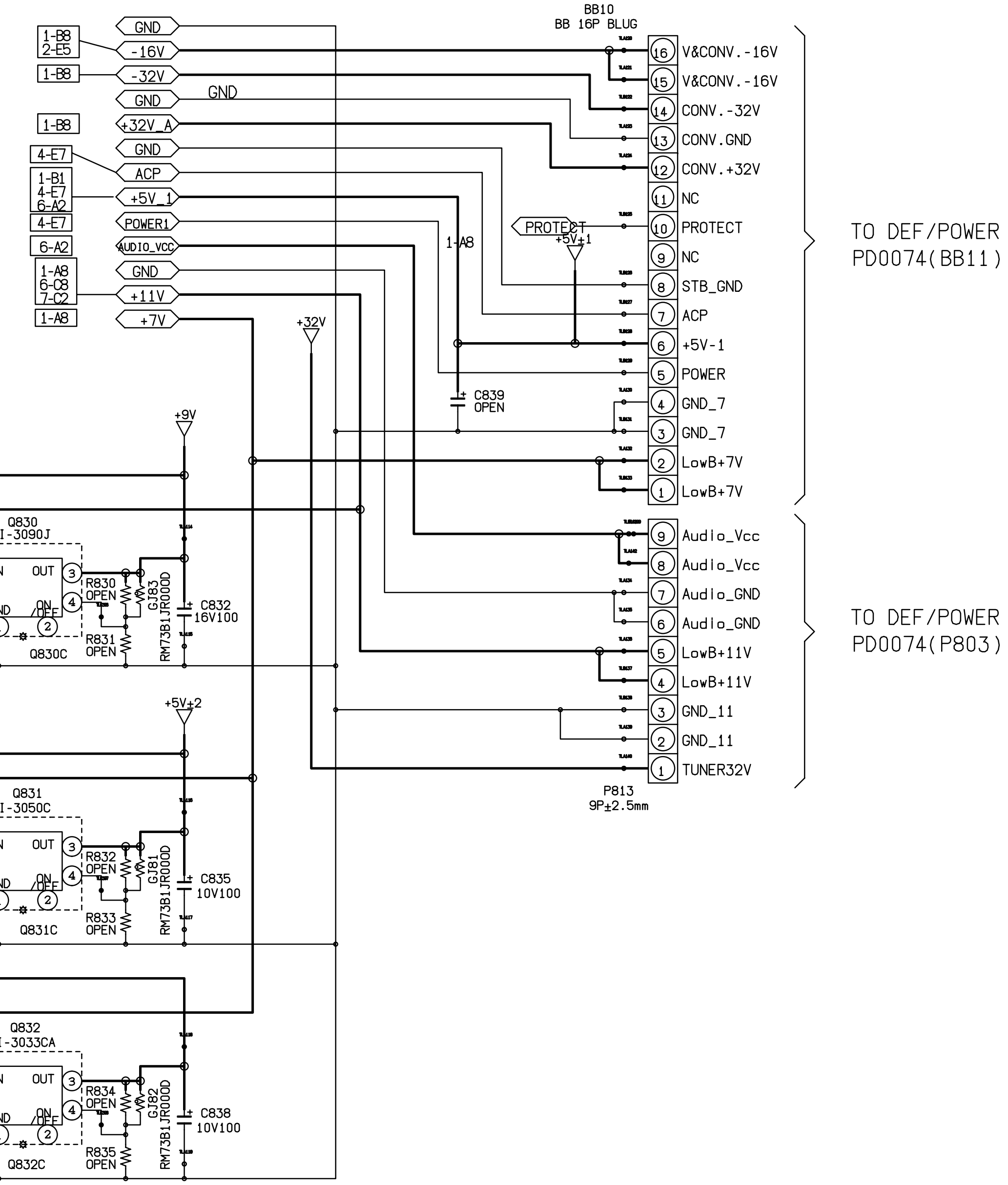

GND
1-B8
2-E5
-16V
1-B8
-32V
GND
GND
1-B8
+32V_A
GND
4-E7
ACP
1-B1
4-E7
6-A2
+5V_1
4-E7
POWER1
6-A2
AUDIO_VCC
GND
1-A8
6-C8
7-C2
+11V
1-A8
+7V
1-A8
PROTECT
+5V+1
+32V
C839
OPEN
BB10
BB 16P BLUG
16 V&CONV.-16V
15 V&CONV.-16V
14 CONV.-32V
13 CONV.GND
12 CONV.+32V
11 NC
10 PROTECT
9 NC
8 STB_GND
7 ACP
6 +5V-1
5 POWER
4 GND_7
3 GND_7
2 LowB+7V
1 LowB+7V
TO DEF/POWER
PD0074(BB11)
9 Audio_Vcc
8 Audio_Vcc
7 Audio_GND
6 Audio_GND
5 LowB+11V
4 LowB+11V
3 GND_11
2 GND_11
1 TUNER32V
P813
9P±2.5mm
TO DEF/POWER
PD0074(P803)
6-A2
+9V
+9V
Q830
SI-3090J
Q830A
IN
OUT
GND
ON /OFF
Q830B
Q830C
R830 OPEN
R831 OPEN
GJ83
RM73B1JR000D
C832
16V100
C830
16V47
C831
63V0.33
1-A1
1-A8
6-A2
+5V_2
+5V+2
Q831
SI-3050C
Q831A
Q831B
Q831C
R832 OPEN
R833 OPEN
GJ81
RM73B1JR000D
C835
10V100
C833
16V47
C834
63V0.33
7-C8
+3.3V_2
Q832
SI-3033CA
Q832A
Q832B
Q832C
R834 OPEN
R835 OPEN
GJ82
RM73B1JR000D
C838
10V100
C836
16V47
C837
63V0.33

SIGNAL/CONVER(Power)

65HDX82 Series

[SHEET-5/7]

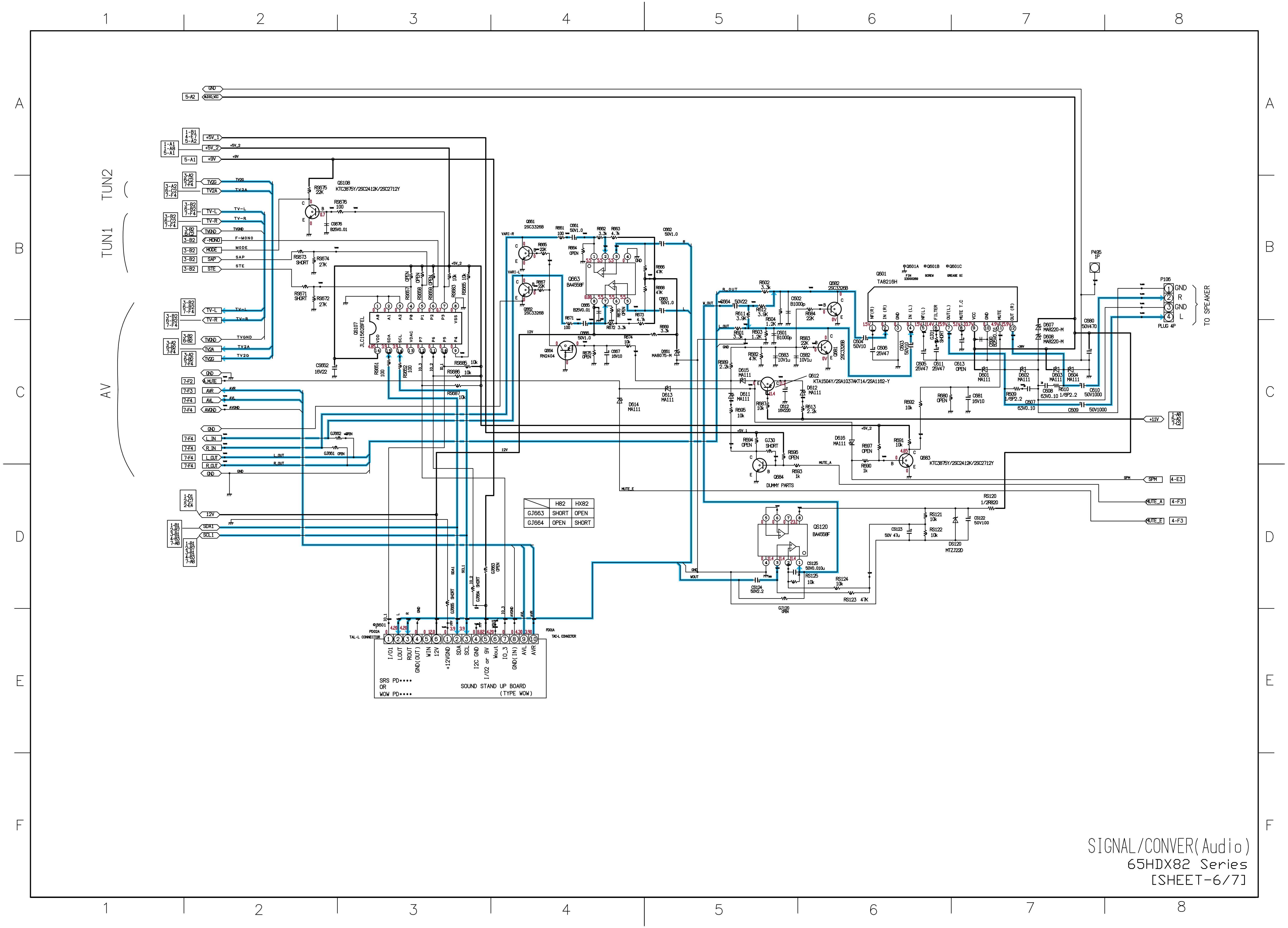

1
A
B
6-A2
+9V
Q830
SI-309
Q830A
5
IN
GND
1
Q830B
C830
16V47
C831
63V0.33
1-A1
1-A8
6-A2
+5V_2
Q83
SI-305
Q831A
Q831B
C833
16V47
C834
63V0.33
7-C8
+3.3V_2
Q832
SI-3033
Q832A
Q832B
C836
16V47
C837
63V0.33
Q832
1


BB10
BB 16P BLUG
1-B8
2-E5
1-B8
1-B8
4-E7
1-B1
4-E7
6-A2
4-E7
6-A2
1-A8
6-C8
7-C2
1-A8
GND
-16V
-32V
GND
GND
+32V_A
GND
ACP
+5V_1
POWER1
AUDIO_VCC
GND
+11V
+7V
1-A8
PROTECT
+5V+1
+32V
+9V
C839
OPEN
16 V&CONV.-16V
15 V&CONV.-16V
14 CONV.-32V
13 CONV.GND
12 CONV.+32V
11 NC
10 PROTECT
9 NC
8 STB_GND
7 ACP
6 +5V-1
5 POWER
4 GND_7
3 GND_7
2 LowB+7V
1 LowB+7V
TO DEF/POWER
PD0074(BB11)
9 Audio_Vcc
8 Audio_Vcc
7 Audio_GND
6 Audio_GND
5 LowB+11V
4 LowB+11V
3 GND_11
2 GND_11
1 TUNER32V
TO DEF/POWER
PD0074(P803)
P813
9P±2.5mm
Q830
I-3090J
OUT
ON
/OFF
ND
Q830C
R830
OPEN
R831
OPEN
GJ83
RM73B1JR000D
C832
16V100
+5V+2
Q831
I-3050C
R832
OPEN
R833
OPEN
GJ81
RM73B1JR000D
C835
10V100
Q831C
Q832
I-3033CA
R834
OPEN
R835
OPEN
GJ82
RM73B1JR000D
C838
10V100
Q832C
A
B

SIGNAL/CONVER(Power)

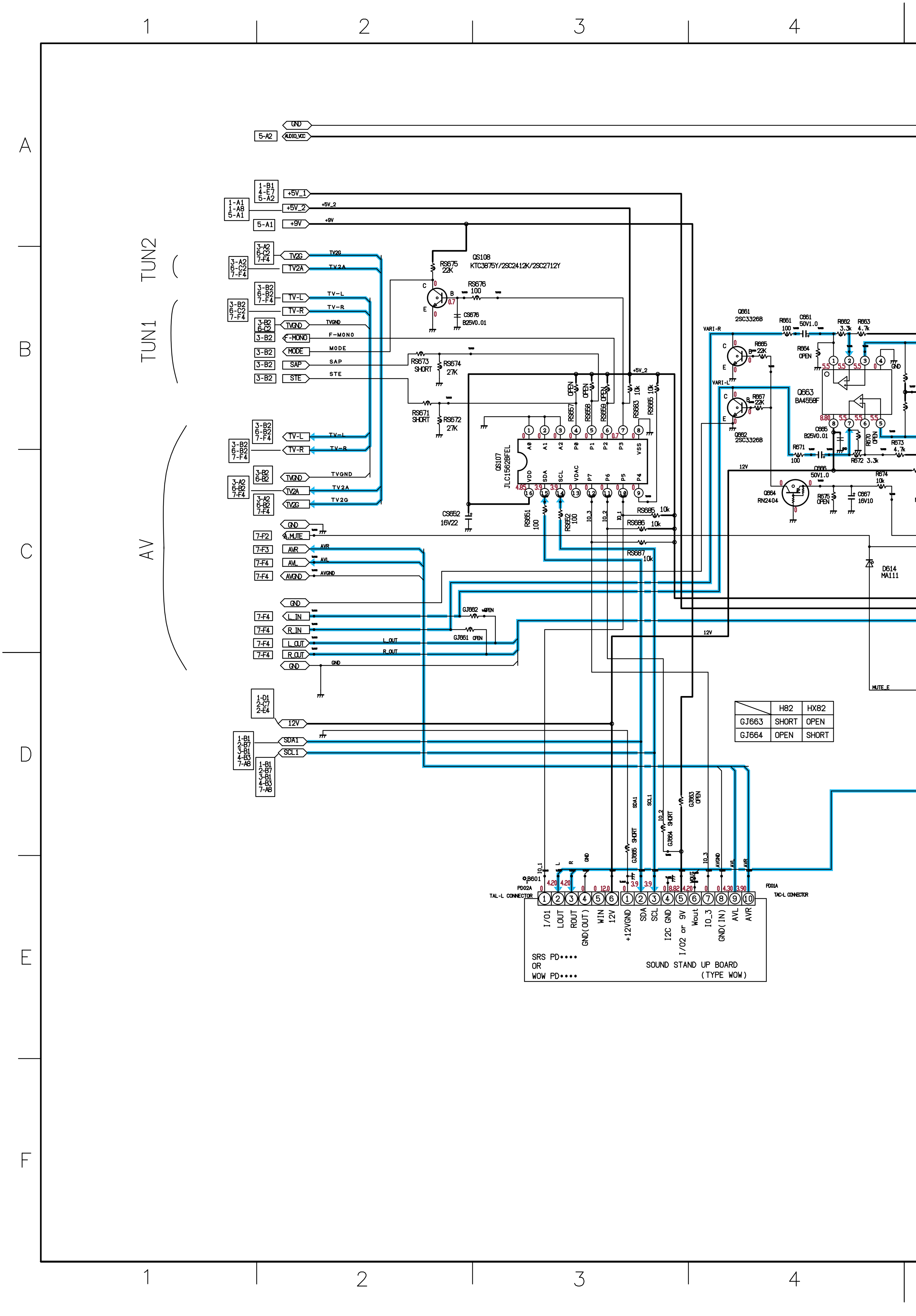
65HDX82 Series

[SHEET-5/7]


TUN2
TUN1
AV
GND
AUDIO_VCC
+5V_1
+5V_2
+5V
TV2G
TV2A
TV-L
TV-R
TVGND
F-MONO
MODE
SAP
STE
L_IN
R_IN
L_OUT
R_OUT
AVR
AVL
AVGND
MUTE
12V
SDA1
SCL1
QS108
KTC3875Y/2SC2412K/2SC2712Y
QS107
JLC1562BFEL
Q661
2SC3326B
Q662
2SC3326B
Q663
BA4558F
Q664
RN2404
Q601
TA8216H
Q681
2SC3326B
Q682
2SC3326B
Q612
KTA1504Y/2SA1037AKT14/2SA1162-Y
Q683
KTC3875Y/2SC2412K/2SC2712Y
Q684
DUMMY PARTS
QS120
BA4558F
D607
MA8220-M
D608
MA8220-M
D614
MA111
D613
MA111
D661
MA8075-M
DS120
MTZJ22D
P495
1P
P106
GND
R
GND
L
PLUG 4P
TO SPEAKER
VARI-R
VARI-L
R_OUT
V_OUT
MUTE_E
MUTE_A
SPM
+11V
TAL-L CONNECTOR
PD02A
PD01A
I/O1
LOUT
ROUT
GND(OUT)
WIN
12V
+12VGND
SDA
SCL
I2C GND
I/O2 or 9V
Wout
IO_3
GND(IN)
AVL
AVR
SRS PD••••
OR
WOW PD••••
SOUND STAND UP BOARD
(TYPE WOW)

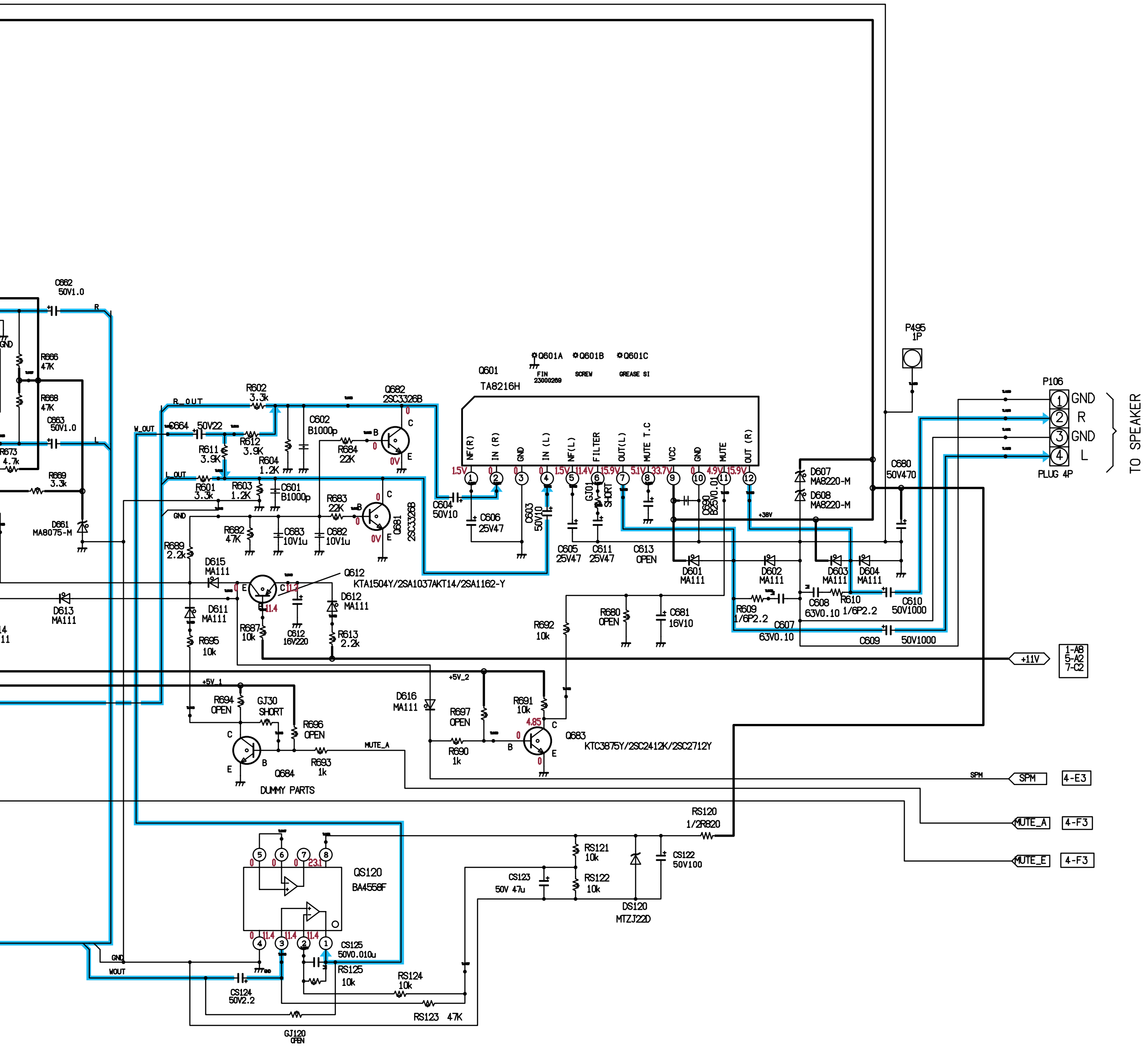
	H82	HX82
GJ663	SHORT	OPEN
GJ664	OPEN	SHORT

SIGNAL/CONVER(Audio)
65HDX82 Series
[SHEET-6/7]



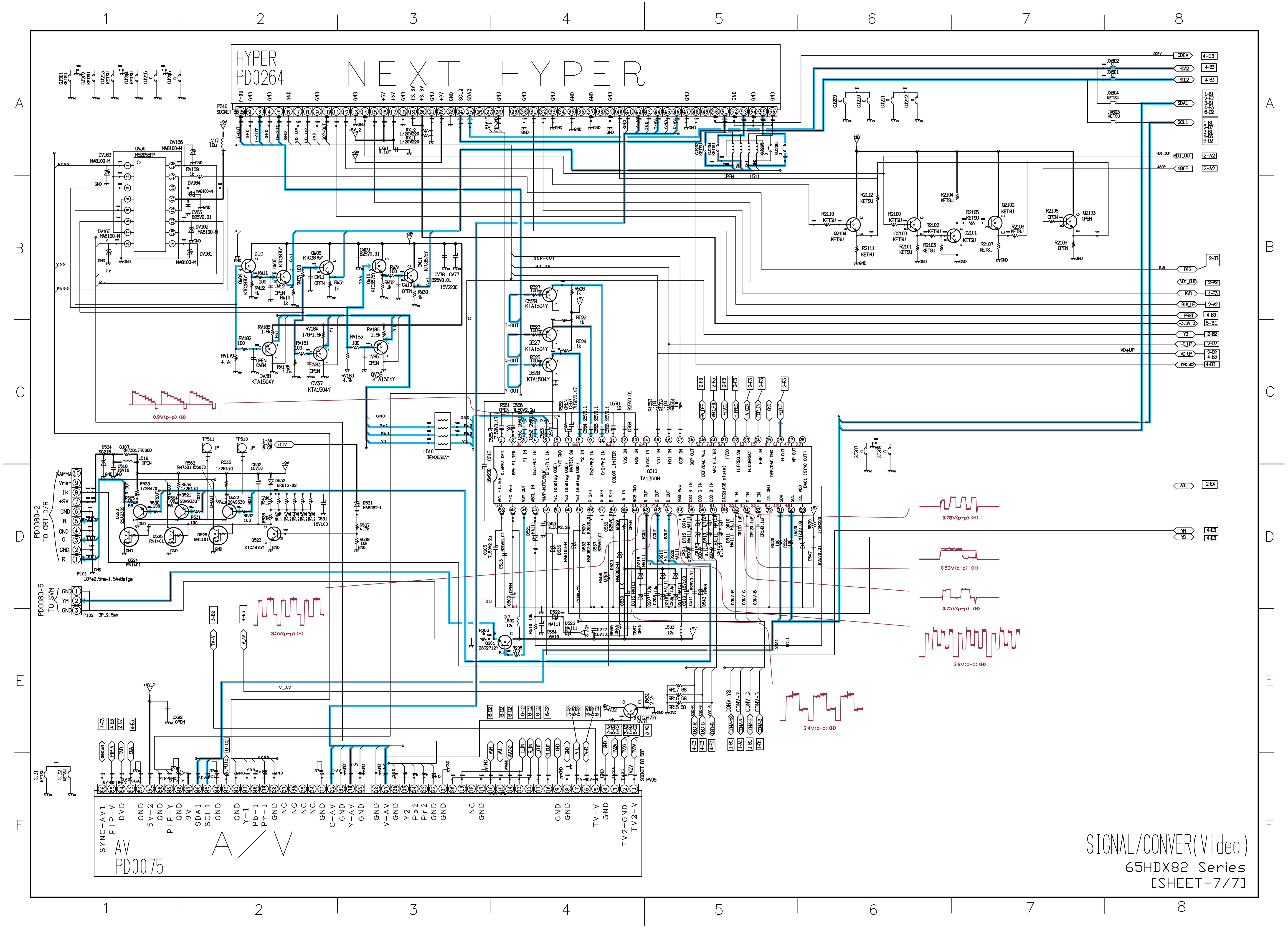
1
2
3
4
A
B
C
D
E
F
GND
5-A2
AUDIO_VCC
1-B1 4-E7 5-A2
+5V_1
1-A1 1-A8 5-A1
+5V_2
5-A1
+9V
TUN2
TUN1
AV
3-A2 6-C2 7-F4
TV2G
TV2A
3-B2 6-B2 7-F4
TV-L
TV-R
3-B2 6-C2
TVGND
3-B2
F-MONO
MODE
SAP
STE
TV-L
TV-R
TVGND
TV2A
TV2G
A_MUTE
7-F2
7-F3
AVR
7-F4
AVL
AVGND
L_IN
R_IN
L_OUT
R_OUT
1-D1 2-C7 2-E4
12V
1-B1 2-B7 3-B1 4-B3 7-A8
SDA1
SCL1
QS108
KTC3975Y/2SC2412K/2SC2712Y
RS675 22K
RS676 100
CS676 B25V0.01
RS673 SHORT
RS674 27K
RS671 SHORT
RS672 27K
QS107
JLC1562BFEL
A0
A1
A2
P0
P1
P2
P3
VSS
VDD
SDA
SCL
VDAC
P7
P6
P5
P4
RS657 OPEN
RS658 OPEN
RS659 OPEN
RS663 10k
RS665 10k
RS651 100
RS652 100
CS652 16V22
RS685 10k
RS686 10k
RS687 10k
IO_3
IO_2
IO_1
GJ662 OPEN
GJ661 OPEN
Q661 2SC3326B
Q662 2SC3326B
VARI-R
VARI-L
R661 100
C661 50V1.0
R662 3.3k
R663 4.7k
R664 OPEN
R665 22K
R667 22K
Q663 BA4558F
C665 B25V0.01
R671 100
R672 3.3k
R670 OPEN
R673 4.7k
C666 50V1.0
R674 10k
Q664 RN2404
R675 OPEN
C667 16V10
D614 MA111
MUTE_E
GJ665 SHORT
GJ664 SHORT
GJ663 OPEN
PB601
PD02A
TAL-L CONNECTOR
PD01A
TAC-L CONNECTOR
I/O1
LOUT
ROUT
GND(OUT)
WIN 12V
+12VGND
SDA
SCL
I2C GND
I/O2 or 9V
Wout
IO_3
GND(IN)
AVL
AVR
SRS PD····
OR
WOW PD····
SOUND STAND UP BOARD
(TYPE WOW)

	H82	HX82
GJ663	SHORT	OPEN
GJ664	OPEN	SHORT



C662 50V1.0
R666 47K
R668 47K
C663 50V1.0
R673 4.7k
R669 3.3k
D661 MA8075-M
R_OUT
L_OUT
W_OUT
GND
C664 50V22
R602 3.3k
R611 3.9K
R612 3.9K
R604 1.2K
R601 3.3k
R603 1.2K
C601 B1000p
C602 B1000p
R684 22K
R683 22K
Q682 2SC3326B
Q681 2SC3326B
R682 47K
C683 10V1u
C682 10V1u
R689 2.2k
D615 MA111
D611 MA111
D613 MA111
Q612 KTA1504Y/2SA1037AKT14/2SA1162-Y
D612 MA111
C612 16V220
R687 10k
R613 2.2k
R695 10k
+5V_1
R694 OPEN
GJ30 SHORT
R696 OPEN
R693 1k
Q684 DUMMY PARTS
MUTE_A
Q601 TA8216H
Q601A FIN 23000269
Q601B SCREW
Q601C GREASE SI
NF(R)
IN (R)
GND
IN (L)
NF(L)
FILTER
OUT(L)
MUTE T.C
VCC
GND
MUTE
OUT (R)
1.5V
15V
11.4V
15.9V
5.1V
33.7V
4.9V
C604 50V10
C606 25V47
C603 50V10
GJ01 SHORT
C605 25V47
C611 25V47
C613 OPEN
C690 B0.01
D601 MA111
D602 MA111
D603 MA111
D604 MA111
D607 MA8220-M
D608 MA8220-M
+38V
C680 50V470
P495 1P
P106
GND
R
GND
L
PLUG 4P
TO SPEAKER
R609 1/6P2.2
C607 63V0.10
C608 63V0.10
R610 1/6P2.2
C610 50V1000
C609 50V1000
R680 OPEN
C681 16V10
R692 10k
+11V
1-A8
5-A2
7-C2
D616 MA111
+5V_2
R697 OPEN
R691 10k
R690 1k
Q683 KTC3875Y/2SC2412K/2SC2712Y
4.85
SPM
4-E3
MUTE_A
4-F3
MUTE_E
4-F3
RS120 1/2R820
QS120 BA4558F
23.1
11.4
RS121 10k
RS122 10k
CS123 50V 47u
CS122 50V100
DS120 MTZJ22D
CS125 50V0.010u
RS125 10k
RS124 10k
RS123 47K
CS124 50V2.2
GJ120 OPEN
WOUT

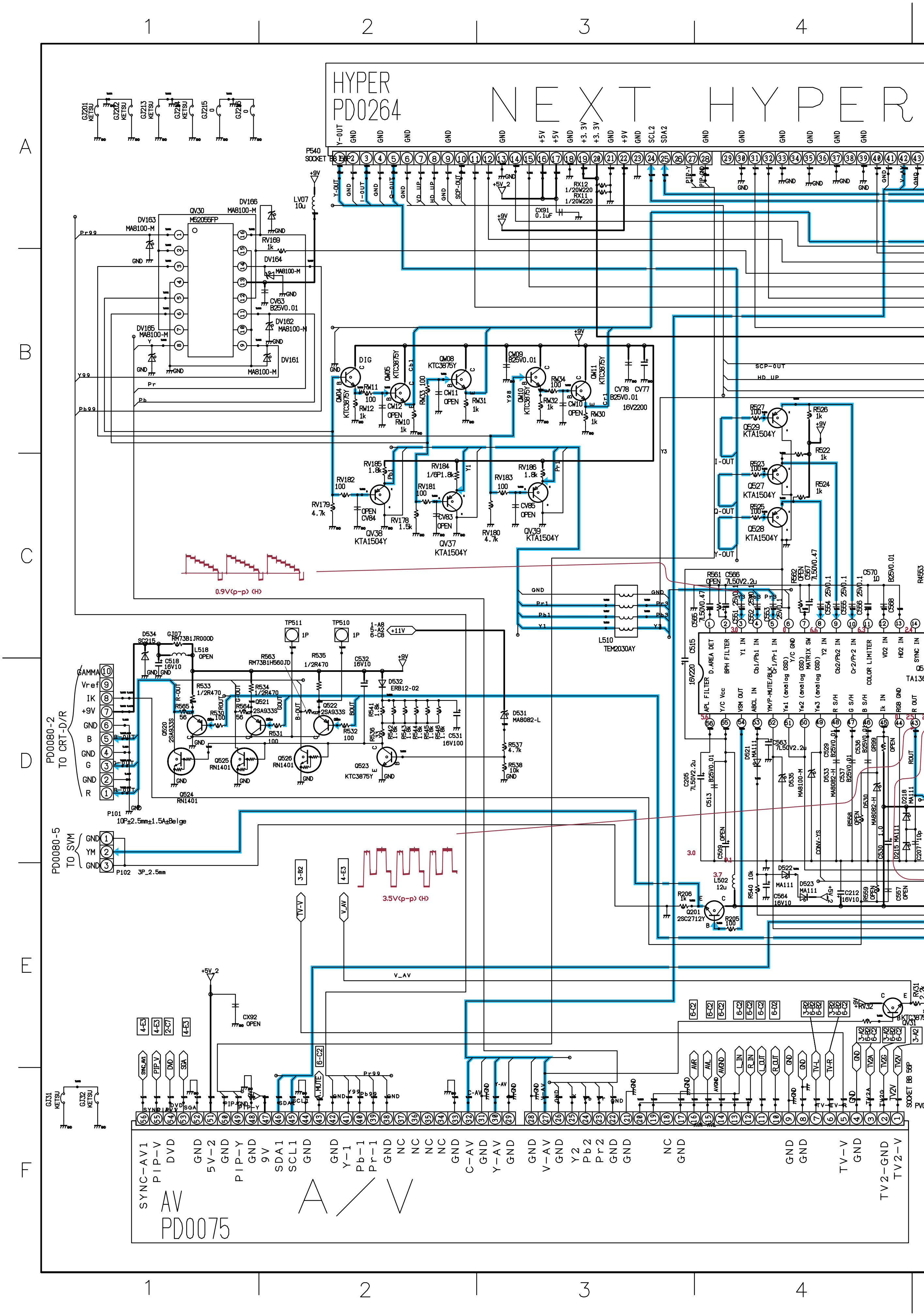
SIGNAL/CONVER(Audio)
65HDX82 Series
[SHEET-6/7]

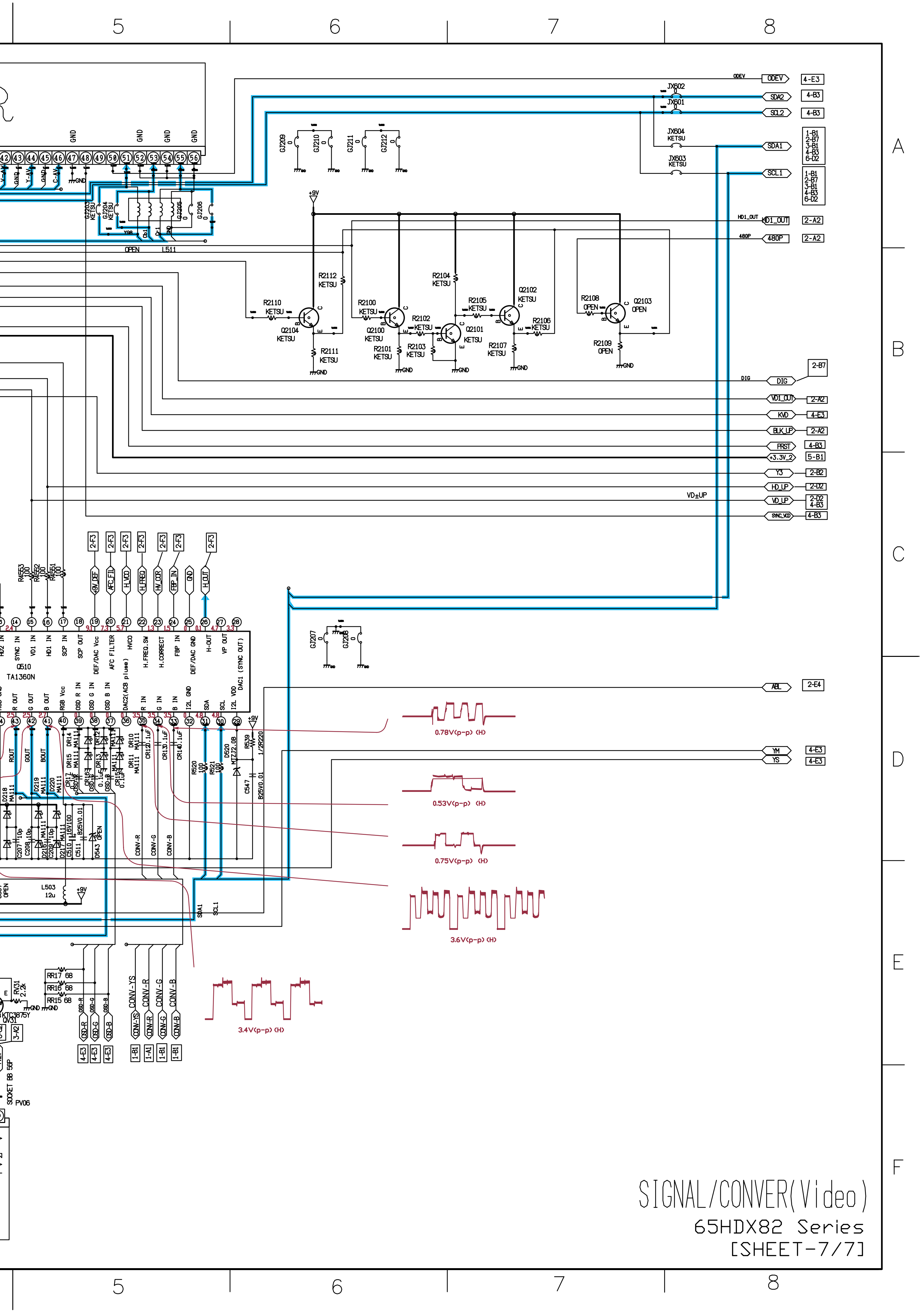

HYPER
PD0264
NEXT HYPER
P540 SOCKET
Y-OUT
I-OUT
Q-OUT
VD UP
HD UP
SCP-OUT
GND
+5V
+3.3V
+9V
SCL2
SDA2
QV30 M52055FP
DV163 MA8100-M
DV165 MA8100-M
DV166 MA8100-M
DV164
DV162 MA8100-M
DV161
LV07 10u
RV169 1k
CV63 B25V0.01
Pr99
Y99
Pb99
Pr
Pb
Y
CX91 0.1uF
RX12 1/20W220
RX11 1/20W220
QV04 KTC3875Y
QV05 KTC3875Y
QV08 KTC3875Y
QV10 KTC3875Y
QV11 KTC3875Y
CV09 B25V0.01
CV78 B25V0.01
CV77 16V2200
QV36 KTA1504Y
QV37 KTA1504Y
QV39 KTA1504Y
RV179 4.7k
RV180 4.7k
RV181 100
RV182 100
RV183 100
RV184 1/6P1.8k
RV185 1.8k
RV186 1.8k
Q527 KTA1504Y
Q528 KTA1504Y
Q529 KTA1504Y
R526 1k
R522 1k
R524 1k
I-OUT
Q-OUT
Y-OUT
0.9V(p-p) (H)
L510 TEM2030AY
Q510 TA1360N
C515 16V220
AFC FLTR
BGP FLTR
Y1 IN
Cb1/Pb1 IN
Cr1/Pr1 IN
Y/C GND
Y2 IN
Cb2/Pb2 IN
Cr2/Pr2 IN
COLOR LIMITER
VD2 IN
HD2 IN
SYNC IN
VD1 IN
HD1 IN
SCP IN
SCP OUT
DEF/DAC Vcc
AFC FLTR
HVCO
H.FREQ.SW
H.CORRECT
FBP IN
DEF/DAC GND
H-OUT
VP OUT
DAC1 (SYNC OUT)
VDD
I2L
SDA
SCL
RGB Vcc
R OUT
G OUT
B OUT
RGB GND
R IN
G IN
B IN
I2L GND
2-F3
ABL
2-E4
0.78V(p-p) (H)
0.53V(p-p) (H)
0.75V(p-p) (H)
3.6V(p-p) (H)
3.4V(p-p) (H)
3.5V(p-p) (H)
GAMMA
Vref
IK
+9V
GND
B
G
R
PD0080-2 TO CRT-D/R
PD0080-5 TO SVM
GND
YM
P101 10P±2.5mm±1.5A±Bel ge
P102 3P 2.5mm
Q520 2SA933S
Q521 2SA933S
Q522 2SA933S
Q523 KTC3875Y
Q524 RN1401
Q525 RN1401
Q526 RN1401
D531 MA8082-L
D532 ERB12-02
D534 SC215
TP511
TP510
+11V
Q201 2SC2712Y
L502 12u
L503 12u
RR17 68
RR16 68
RR15 68
CONV-YS
CONV-R
CONV-G
CONV-B
ODEV
SDA2
SCL2
SDA1
SCL1
JX501
JX502
JX503 KETSU
JX504 KETSU
HD1_OUT
480P
Q2100 KETSU
Q2101 KETSU
Q2102 KETSU
Q2103 OPEN
Q2104 KETSU
DIG
VD1_OUT
KVD
BLK_UP
FRST
+3.3V_2
Y3
HD_UP
VD_UP
SYNC_VD
YM
YS
4-E3
4-B3
2-A2
2-B7
5-B1
2-B2
2-D2
2-D2 4-B3
GJ201 KETSU
GJ207
GJ208
GJ209
GJ210
GJ211
GJ212
GJ213 KETSU
GJ215
GJ31 KETSU
GJ32 KETSU
V_AV
TV-V
CX92 OPEN
+5V_2
SOCKET 88 56P
PV06
SYNC-AV1
PIP-V
DVD
GND
5V-2
PIP-Y
9V
SDA1
SCL1
Y-1
Pb-1
Pr-1
NC
C-AV
Y-AV
V-AV
Y2
Pb2
Pr2
TV-V
TV2-GND
TV2-V
AV
PD0075
A/V
A
B
C
D
E
F
1
2
3
4
5
6
7
8

SIGNAL/CONVER(Video)

65HDX82 Series

[SHEET-7/7]

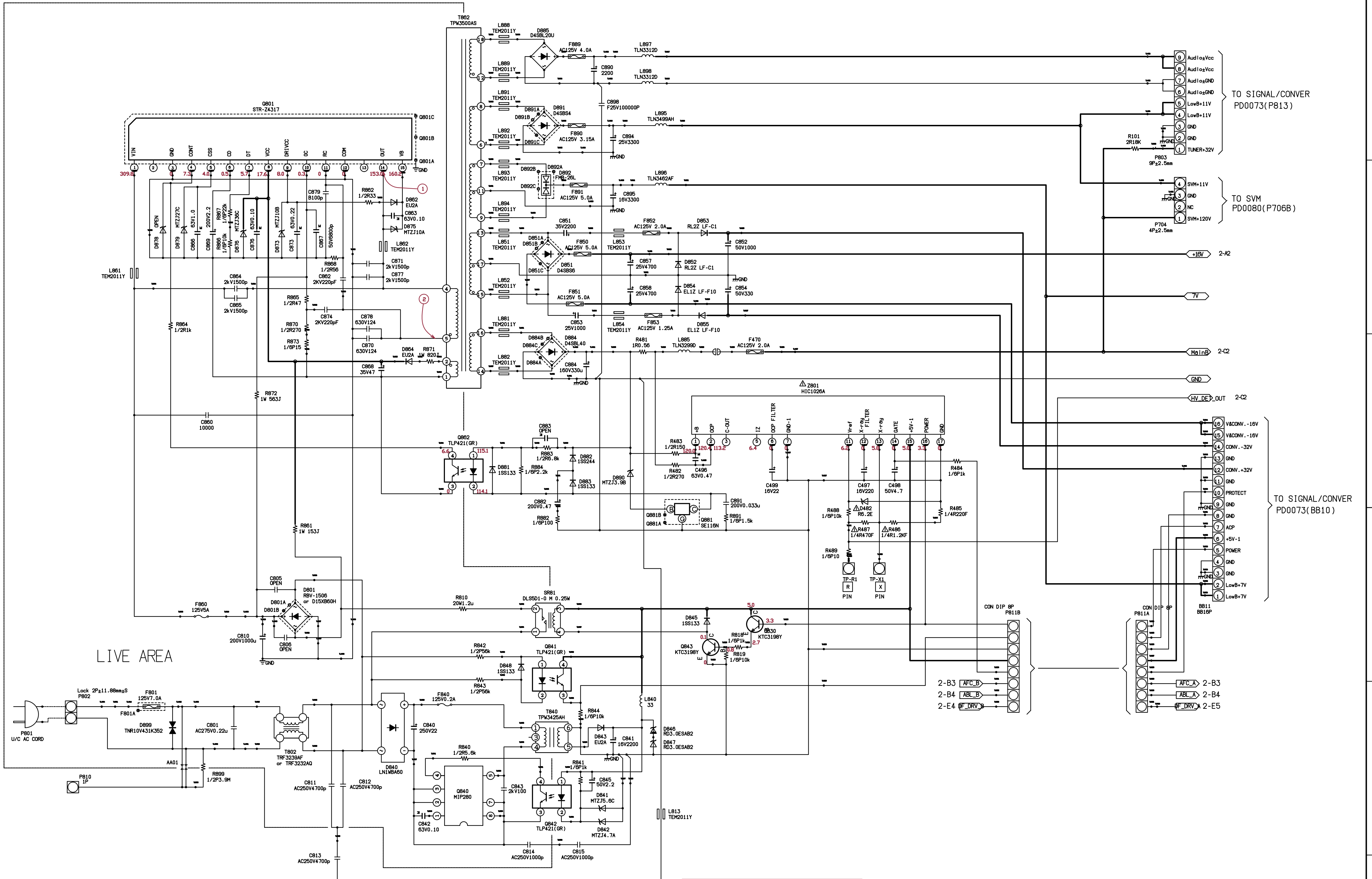

1
2
3
4
A
B
C
D
E
F
HYPER
PD0264
NEXT HYPER
P540 SOCKET BB 50P
Y-OUT
GND
I-OUT
Q-OUT
VD UP
HD UP
SCP-OUT
+5V
+3.3V
+9V
SCL2
SDA2
PIP-Y
PIP-GND
GJ201 KETSU
GJ202 KETSU
GJ213 KETSU
GJ214 KETSU
GJ215
GJ216
QV30 M52055FP
DV163 MA8100-M
DV164
DV165 MA8100-M
DV166 MA8100-M
DV161
DV162 MA8100-M
CV63 B25V0.01
RV169 1k
LV07 10u
Pr99
Y99
Pb99
Pr
Pb
CX91 0.1uF
RX12 1/20W220
RX11 1/20W220
QW04 KTC3875Y
QW05 KTC3875Y
QW08 KTC3875Y
QW10 KTC3875Y
QW11 KTC3875Y
CW09 B25V0.01
CV78 B25V0.01
CV77 16V2200
RW11 100
RW12 1k
RW10 1k
RW33 100
RW31 1k
RW34 100
RW32 1k
RW30 1k
CW11 OPEN
CW12 OPEN
CW10 OPEN
RV185 1.8k
RV184 1/6P1.8k
RV186 1.8k
RV182 100
RV181 100
RV183 100
RV179 4.7k
RV178 1.5k
RV180 4.7k
CV84 OPEN
CV83 OPEN
CV85 OPEN
QV38 KTA1504Y
QV37 KTA1504Y
QV39 KTA1504Y
Y98
Y3
0.9V(p-p) (H)
R527 100
R526 1k
Q529 KTA1504Y
R522 1k
R523 100
R524 1k
Q527 KTA1504Y
R525 100
Q528 KTA1504Y
I-OUT
Q-OUT
Y-OUT
HD UP
SCP-OUT
L510 TEM2030AY
R561 OPEN
C566 7L50V2.2u
C565 7L50V0.47
C567 7L50V0.47
C570 1D
C515 16V220
TA136
APL FILTER
D.AREA DET
BPH FILTER
Y1 IN
Cb1/Pb1 IN
Cr1/Pr1 IN
Y/C GND
MATRIX SW
Y2 IN
Cb2/Pb2 IN
Cr2/Pr2 IN
COLOR LIMITER
VD2 IN
HD2 IN
SYNC IN
Y/C Vcc
YSM OUT
ABCL IN
YM/P-MUTE/BLK
Ys1 (analog OSD)
Ys2 (analog OSD)
Ys3 (analog OSD)
R S/H
G S/H
B S/H
Ik IN
RGB GND
R OUT
TP511 1P
TP510 1P
1-A8 5-A2 6-C8
+11V
D534 SC215
GJ07 RM73B1JR000D
L518 OPEN
C518 16V10
R563 RM73B1H560JD
R535 1/2R470
C532 16V10
R533 1/2R470
R534 1/2R470
D532 ERB12-02
R565 56
R530 100
R564 56
R531 100
R532 100
Q520 2SA933S
Q521 2SA933S
Q522 2SA933S
Q525 RN1401
Q526 RN1401
Q524 RN1401
Q523 KTC3875Y
R541 1.8k
C531 16V100
D531 MA8082-L
R537 4.7k
R538 10k
R-OUT
G-OUT
B-OUT
GAMMA
Vref
IK
+9V
GND
B
G
R
PD0080-2 TO CRT-D/R
P101 10P±2.5mm±1.5A±Beige
PD0080-5 TO SVM
YM
P102 3P_2.5mm
3-B2
4-E3
TV-V
V_AV
3.5V(p-p) (H)
R206 1k
Q201 2SC2712Y
R205 100
L502 12u
R540 10k
C564 16V10
C212 16V10
D522 MA111
D523 MA111
C205 7L50V2.2u
C513
C509 OPEN
D521 MA111
D535
D533 MA8082-H
D530 MA8082-H
R558 OPEN
D218 MA111
D215 MA111
C207 10p
C557 OPEN
R559 OPEN
C563 7L50V2.2u
+5V_2
CX92 OPEN
SYNC-AV1
PIP-V
DVD
SGA
4-E3
2-C7
6-C2
A-MUTE
SDA1
SCL1
Y99
Pb99
Pr99
C-AV
Y-AV
V-AV
AVR
AVL
AVGND
L_IN
R_IN
L_OUT
R_OUT
TV-L
TV-R
TV2A
TV2G
TV2V
SOCKET BB 56P
3-B2 6-B2
3-A2 6-B2
RV32
RV31 2.2k
QV31 KTC3875
GJ31 KETSU
GJ32 KETSU
SYNC-AV1
PIP-V
DVD
GND
5V-2
PIP-Y
9V
SCL1
Y-1
Pb-1
Pr-1
NC
C-AV
Y-AV
V-AV
Y2
Pb2
Pr2
TV-V
TV2-GND
TV2-V
AV
PD0075
A/V

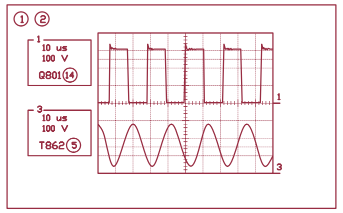

5
6
7
8
A
B
C
D
E
F
ODEV
SDA2
SCL2
SDA1
SCL1
4-E3
4-B3
1-B1 2-B7 3-B1 4-B3 6-D2
JX602
JX601
JX604 KETSU
JX603 KETSU
GJ209
GJ210
GJ211
GJ212
GJ203 KETSU
GJ204 KETSU
GJ205
GJ206
OPEN
L511
+9V
HD1_OUT
480P
2-A2
R2112 KETSU
R2110 KETSU
Q2104 KETSU
R2111 KETSU
R2100 KETSU
Q2100 KETSU
R2101 KETSU
R2102 KETSU
R2103 KETSU
Q2101 KETSU
R2104 KETSU
R2105 KETSU
Q2102 KETSU
R2106 KETSU
R2107 KETSU
R2108 OPEN
Q2103 OPEN
R2109 OPEN
GND
DIG
2-B7
VD1_OUT
KVD
BLK_UP
FRST
+3.3V_2
Y3
HD_UP
VD_UP
SYNC_VOD
VD±UP
4-E3
2-A2
4-B3
5-B1
2-B2
2-D2
2-D2 4-B3
+9V_DEF
AFC_FIL
H_VCO
H_FREQ
HV_COR
FBP_IN
GND
H_OUT
2-F3
R4553
R4552
R4551
Q510
TA1360N
SYNC IN
VD1 IN
HD1 IN
SCP IN
SCP OUT
DEF/DAC Vcc
AFC FILTER
HVCO
H.FREQ.SW
H.CORRECT
FBP IN
DEF/DAC GND
H-OUT
VP OUT
DAC1 (SYNC OUT)
R OUT
G OUT
B OUT
RGB Vcc
OSD R IN
OSD G IN
OSD B IN
DAC2(ACB pluse)
R IN
G IN
B IN
I2L GND
SDA
SCL
I2L VDD
GJ207
GJ208
ABL
2-E4
YM
YS
D520 MTZJ2.0B
R539 1/2R220
C547 B25V0.01
R520 100
R521 100
CONV-R
CONV-G
CONV-B
L503 12u
SDA1
SCL1
0.78V(p-p) (H)
0.53V(p-p) (H)
0.75V(p-p) (H)
3.6V(p-p) (H)
3.4V(p-p) (H)
RR17 68
RR16 68
RR15 68
RV31 2.2k
KTC3875Y
QV31
3-A2
OSD-R
OSD-G
OSD-B
CONV-YS
1-B1
1-A1
SOCKET 8B 56P
PV06

SIGNAL/CONVER(Video)

65HDX82 Series

[SHEET-7/7]


T862
TPW3500AS
Q801
STR-Z4317
Q801C
Q801B
Q801A
VIN
GND
CONT
OCS
CD
DT
VCC
DRIVCC
OC
RC
COM
OUT
VB
309.0
0
7.3
4.0
0.5
5.7
17.6
8.0
0.3
0
153.0
160.2
L888
TEM2011Y
D885
D4SBL20U
F889
AC125V 4.0A
C890
2200
L897
TLN3312D
L898
TLN3312D
L889
TEM2011Y
L891
TEM2011Y
D891A
D891B
D891C
D891
D4SBS4
F890
AC125V 3.15A
C894
25V3300
C898
F25V100000P
L895
TLN3499AH
L892
TEM2011Y
L893
TEM2011Y
D892A
D892B
D892C
D892
FMG-26L
F891
AC125V 5.0A
C895
16V3300
L896
TLN3462AF
L894
TEM2011Y
C851
35V2200
F852
AC125V 2.0A
D853
RL2Z LF-C1
C852
50V1000
L851
TEM2011Y
D851A
D851B
D851C
D851
D4SB56
F850
AC125V 5.0A
L853
TEM2011Y
C857
25V4700
D852
RL2Z LF-C1
L852
TEM2011Y
F851
AC125V 5.0A
C858
25V4700
D854
EL1Z LF-F10
C854
50V330
L881
TEM2011Y
C853
25V1000
L854
TEM2011Y
F853
AC125V 1.25A
D855
EL1Z LF-F10
D884B
D884C
D884A
D884
D4SBL40
R481
1R0.56
L885
TLN32990
F470
AC125V 2.0A
L882
TEM2011Y
C884
160V330u
GND
R862
1/2R33
D862
EU2A
C863
63V0.10
D875
MTZJ10A
L862
TEM2011Y
C879
8100p
C871
2kV1500p
C877
2kV1500p
R868
1/2R56
C862
2KV220p
L861
TEM2011Y
C864
2kV1500p
C865
2kV1500p
R865
1/2R47
C874
2KV220pF
C878
630V124
R864
1/2R1k
R870
1/2R270
R873
1/6P15
C870
630V124
D864
EU2A
R871
1W 820J
C868
35V47
R872
1W 563J
C860
10000
OPEN
D878
D879
MTZ27C
C866
63V1.0
C869
200V2.2
R866
1/6P10k
R867
1/6P22k
D876
MTZJ36C
C876
63V0.10
D873
MTZJ10B
C873
63V0.22
C867
50V6800p
Z801
HIC1026A
+B
OCP
C-OUT
IZ
OCP FILTER
GND-1
Vref
X-ray FILTER
X-ray
GATE
+5V-1
POWER
GND
120.4
113.2
6.4
6.4
5.4
5.0
3.3
R483
1/2R150
R482
1/2R270
C496
63V0.47
C499
16V22
C497
16V220
C498
50V4.7
R484
1/6P1k
R485
1/4R220F
R488
1/6P10k
D482
R6.2E
R487
1/4R470F
R486
1/4R1.2KF
R489
1/6P10
TP-R1
R
PIN
TP-X1
X
PIN
Q862
TLP421(GR)
6.6
115.1
114.1
C883
OPEN
R883
1/2R6.8k
D882
1SS244
D881
1SS133
R884
1/6P2.2k
D883
1SS133
D890
MTZJ3.9B
C882
200V0.47
R882
1/6P100
Q881B
Q881A
Q881
SE116N
C891
200V0.033u
R891
1/6P1.5k
R861
1W 153J
C805
OPEN
D801
RBV-1506
or D15XB60H
D801A
D801B
F860
125V5A
C810
200V1000u
C806
OPEN
LIVE AREA
R810
20W1.2u
SR81
DLS5D1-0 M 0.25W
D845
1SS133
Q843
KTC3198Y
R818
1/6P1k
Q830
KTC3198Y
R819
1/6P10k
5.0
3.3
2.7
0.1
R842
1/2P56k
Q841
TLP421(GR)
D848
1SS133
R843
1/2P56k
L840
33
F840
125V0.2A
C840
250V22
T840
TPW3425AH
R844
1/6P10k
D843
EU2A
C841
16V2200
D846
RD3.0ESAB2
D847
RD3.0ESAB2
R840
1/2R5.6k
Q840
MIP280
C843
2kV100
R841
1/6P1k
C845
50V2.2
D841
MTZJ5.6C
Q842
TLP421(GR)
D842
MTZJ4.7A
C842
63V0.10
C814
AC250V1000p
C815
AC250V1000p
L813
TEM2011Y
Lock 2P±11.88mm±S
P802
F801
125V7.0A
F801A
P801
U/C AC CORD
D899
TNR10V431K352
C801
AC275V0.22u
T802
TRF3239AF
or TRF3232AQ
AA01
R899
1/2F3.9M
P810
1P
D840
LN1WBA60
C811
AC250V4700p
C812
AC250V4700p
C813
AC250V4700p
Audio±Vcc
Audio±Vcc
Audio±GND
Audio±GND
LowB+11V
LowB+11V
GND
GND
TUNER+32V
TO SIGNAL/CONVER
PD0073(P813)
R101
2R18K
P803
9P±2.5mm
SVM+11V
GND
NC
SVM+120V
TO SVM
PD0080(P706B)
P704
4P±2.5mm
+16V
2-A2
7V
MainB
2-C2
GND
HV_DET_OUT
2-C2
V&CONV.-16V
V&CONV.-16V
CONV.-32V
GND
CONV.+32V
GND
PROTECT
GND
GND
ACP
+5V-1
POWER
GND
GND
LowB+7V
LowB+7V
TO SIGNAL/CONVER
PD0073(BB10)
BB11
BB16P
CON DIP 8P
P811B
CON DIP 8P
P811A
2-B3
AFC_B
2-B4
ABL_B
2-E4
IF_DRV_B
AFC_A
2-B3
ABL_A
2-B4
IF_DRV_A
2-E5



NOTE|

1. RESISTOR Resistance is shown in ohm [k = 1,000. M = 1,000,000] , All resistors sre 1/6W and 5% tolerance carbon resistor,unless otherwise noted as the following marks.

1/2R | Metal or Metal oxide of 1/2 watt 1/2S | Solid of 1/2 watt
1RF | Fuse resistor of 1 watt 10W | Cement of 10 watts
K = ±10% G = ±2% F = ±1%

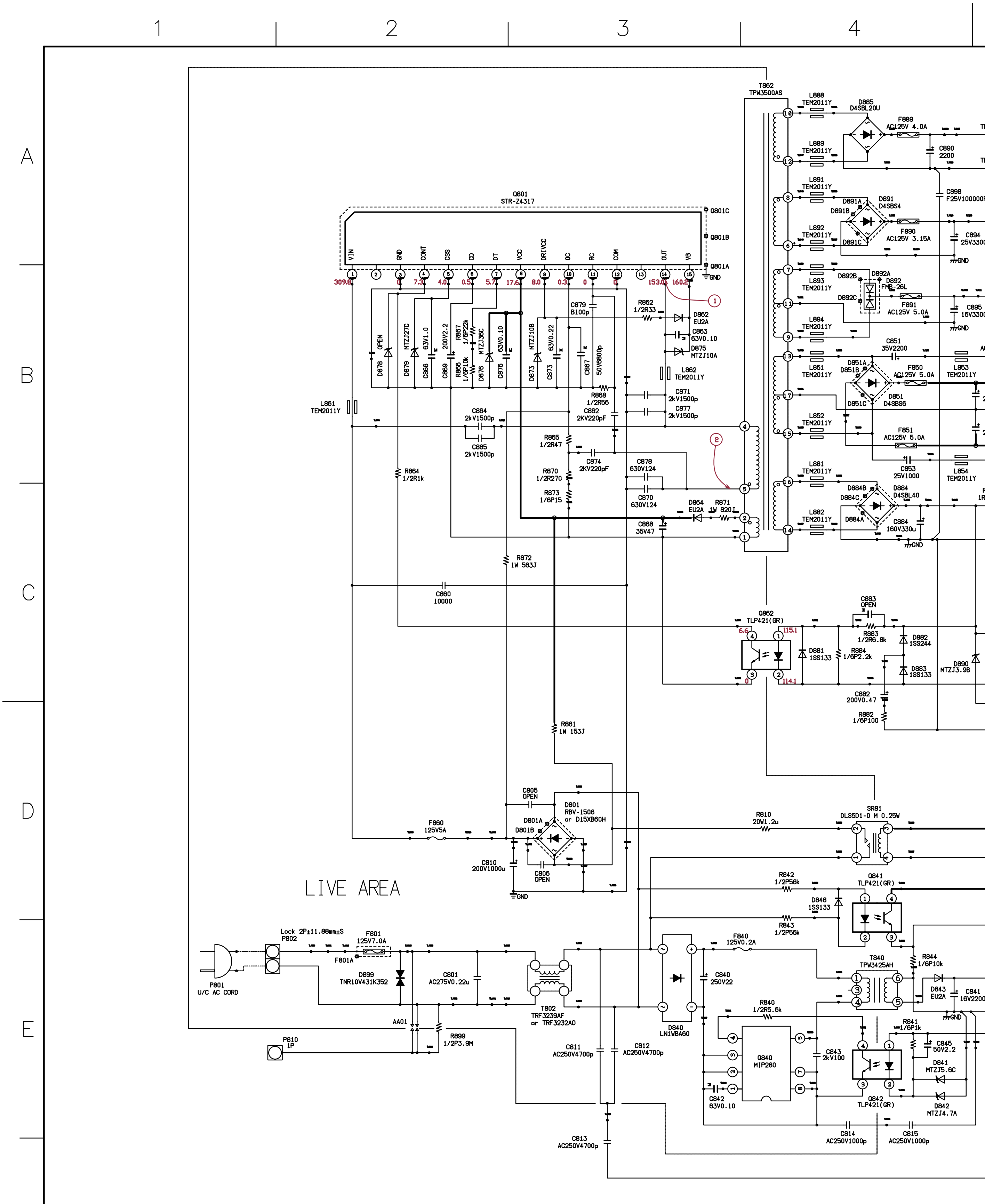
2.CAPACITOR Unless otherwise noted in schematic,all capacitor valuse less than 1 are expressed in μF,and the values more than 1 in pF.
All capacitors are ceramic 50V, unless otherwise noted as the following marks.
⊣⊢ Electrolitic capacitor ⊣⊢ Mylar capacitor

3. The parts indicated with " " have special characteristics should be replaced with identical parts only.

4. This schematic diagram is the latest the time of copying, so it must be changet in acordance with all informed modification notices.

POWER/DEF(POWER)

65HDX82 Series
[SHEET-1/2]


1
2
3
4
A
B
C
D
E
F
T862
TPW3500AS
L888
TEM2011Y
D885
D4SBL20U
F889
AC125V 4.0A
C890
2200
L889
TEM2011Y
L891
TEM2011Y
C898
F25V10000F
D891A
D891B
D891
D4SBS4
F890
AC125V 3.15A
L892
TEM2011Y
D891C
C894
25V330
GND
D892B
D892A
D892
FMB-26L
L893
TEM2011Y
D892C
F891
AC125V 5.0A
C895
16V330
L894
TEM2011Y
C851
35V2200
D851A
D851B
F850
AC125V 5.0A
L853
TEM2011Y
L851
TEM2011Y
D851
D4SBS6
D851C
L852
TEM2011Y
F851
AC125V 5.0A
C853
25V1000
L854
TEM2011Y
L881
TEM2011Y
D884B
D884
D4SBL40
D884C
D884A
L882
TEM2011Y
C884
160V330u
Q801
STR-Z4317
Q801C
Q801B
Q801A
GND
VIN
GND
CONT
CSS
CD
DT
VCC
DRIVCC
DC
RC
COM
OUT
VB
309.8
0
7.3
4.0
0.5
5.7
17.6
8.0
0.3
0
0
153.0
160.2
C879
B100p
R862
1/2R33
D862
EU2A
C863
63V0.10
D875
MTZJ10A
L862
TEM2011Y
OPEN
D878
MTZJ27C
D879
63V1.0
C866
200V2.2
C869
R867
1/6P22k
R866
1/6P10k
MTZJ36C
D876
63V0.10
C876
MTZJ10B
D873
63V0.22
C873
C867
50V6800p
R868
1/2R56
C871
2kV1500p
C877
2kV1500p
C862
2KV220pF
L861
TEM2011Y
C864
2kV1500p
C865
2kV1500p
R865
1/2R47
C874
2KV220pF
C878
630V124
R870
1/2R270
R873
1/6P15
C870
630V124
R864
1/2R1k
D864
EU2A
R871
1W 820J
C868
35V47
R872
1W 563J
C860
10000
Q862
TLP421(GR)
6.6
115.1
0
114.1
C883
OPEN
R883
1/2R6.8k
D882
1SS244
D881
1SS133
R884
1/6P2.2k
D883
1SS133
D890
MTZJ3.9B
C882
200V0.47
R882
1/6P100
R861
1W 153J
C805
OPEN
D801
RBV-1506
or D15XB60H
D801A
D801B
F860
125V5A
C810
200V1000u
C806
OPEN
GND
R810
20W1.2u
SR81
DLS5D1-0 M 0.25W
LIVE AREA
R842
1/2P56k
Q841
TLP421(GR)
D848
1SS133
R843
1/2P56k
Lock 2P±11.88mm±S
P802
F801
125V7.0A
F801A
D899
TNR10V431K352
C801
AC275V0.22u
P801
U/C AC CORD
T802
TRF3239AF
or TRF3232AQ
F840
125V0.2A
C840
250V22
R844
1/6P10k
T840
TPW3425AH
D843
EU2A
C841
16V220
D840
LN1WBA60
R840
1/2R5.6k
R841
1/6P1k
AA01
R899
1/2P3.9M
P810
1P
C811
AC250V4700p
C812
AC250V4700p
Q840
MIP280
C843
2kV100
C845
50V2.2
D841
MTZJ5.6C
C842
63V0.10
Q842
TLP421(GR)
D842
MTZJ4.7A
C814
AC250V1000p
C815
AC250V1000p
C813
AC250V4700p

NOTE|

1. RESISTOR Resistance is shown in ohm [k = 1,000. M = 1,000,000] , All resistors sre 1/6W and 5% tolerance carbon resistor,unless otherwise noted as the following marks.

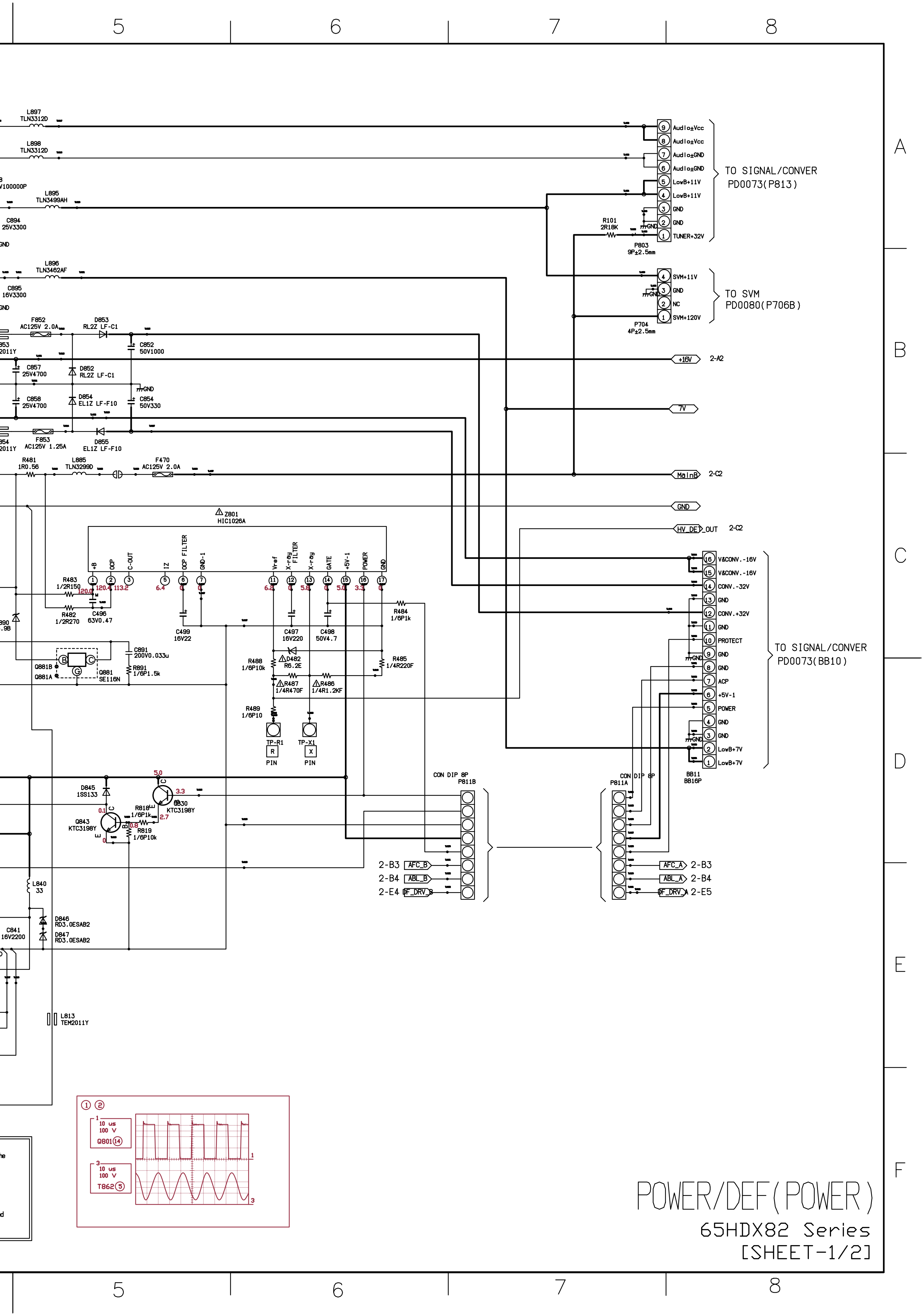
1/2R | Metal or Metal oxide of 1/2 watt
1/2S | Solid of 1/2 watt
1RF | Fuse resistor of 1 watt
10W | Cement of 10 watts
K = ±10% G = ±2% F = ±1%

2.CAPACITOR Unless otherwise noted in schematic,all capacitor valuse less than 1 are expressed in µF,and the values more than 1 in pF.
All capacitors are ceramic 50V, unless otherwise noted as the following marks.

Electrolitic capacitor Mylar capacitor

3. The parts indicated with " " have special characteristics should be replaced with identical parts only.

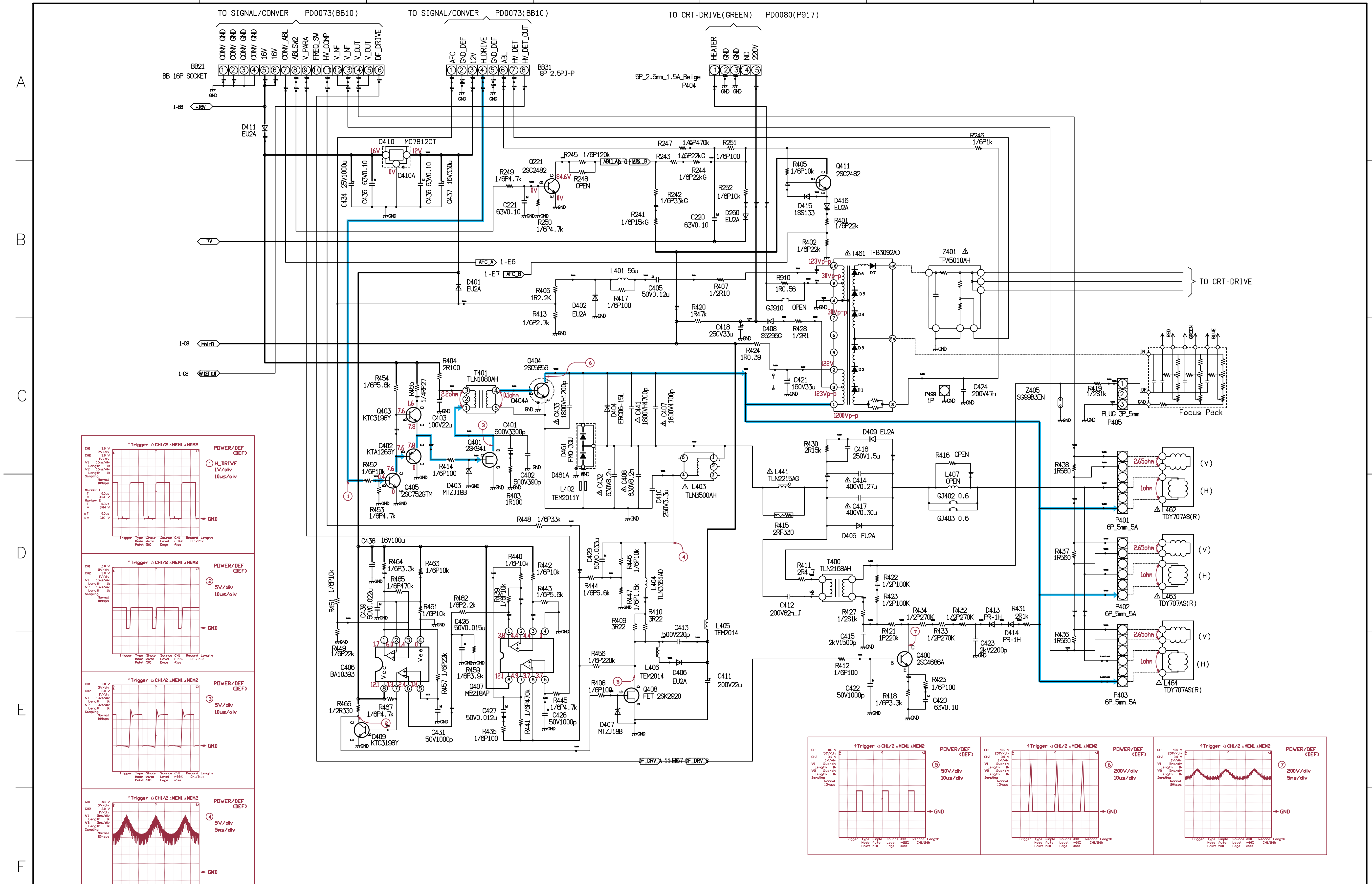
4. This schematic diagram is the latest the time of copying, so it must be changet in acordance with all informed modification notices.


5
6
7
8
A
B
C
D
E
F
L897
TLN3312D
L898
TLN3312D
V100000P
L895
TLN3499AH
C894
25V3300
GND
L896
TLN3462AF
C895
16V3300
GND
F852
AC125V 2.0A
D853
RL2Z LF-C1
C852
50V1000
2011Y
C857
25V4700
D852
RL2Z LF-C1
GND
C858
25V4700
D854
EL1Z LF-F10
C854
50V330
F853
AC125V 1.25A
D855
EL1Z LF-F10
2011Y
R481
1R0.56
L885
TLN3299D
F470
AC125V 2.0A
Z801
HIC1026A
+B
OCP
C-OUT
IZ
OCP FILTER
GND-1
Vref
X-ray FILTER
X-ray
GATE
+5V-1
POWER
GND
1
2
3
5
6
7
11
12
13
14
15
16
17
120.0
120.4
113.2
6.4
0
0
6.2
0
5.8
0
5.0
3.3
0
R483
1/2R150
R482
1/2R270
C496
63V0.47
C499
16V22
C497
16V220
C498
50V4.7
R484
1/6P1k
R485
1/4R220F
D482
R6.2E
R488
1/6P10k
R487
1/4R470F
R486
1/4R1.2KF
R489
1/6P10
TP-R1
R
PIN
TP-X1
X
PIN
C891
200V0.033u
R891
1/6P1.5k
Q881B
Q881A
B
C
G
Q881
SE116N
D845
1SS133
5.0
3.3
Q830
KTC3198Y
R818
1/6P1k
2.7
R819
1/6P10k
0.1
0.8
0
Q843
KTC3198Y
L840
33
D846
RD3.0ESAB2
D847
RD3.0ESAB2
C841
16V2200
L813
TEM2011Y
9 Audio±Vcc
8 Audio±Vcc
7 Audio±GND
6 Audio±GND
5 LowB+11V
4 LowB+11V
3 GND
2 GND
1 TUNER+32V
TO SIGNAL/CONVER
PD0073(P813)
R101
2R18K
GND
P803
9P±2.5mm
4 SVM+11V
3 GND
2 NC
1 SVM+120V
GND
TO SVM
PD0080(P706B)
P704
4P±2.5mm
+16V
2-A2
7V
MainB
2-C2
GND
HV_DET_OUT
2-C2
16 V&CONV.-16V
15 V&CONV.-16V
14 CONV.-32V
13 GND
12 CONV.+32V
11 GND
10 PROTECT
9 GND
8 GND
7 ACP
6 +5V-1
5 POWER
4 GND
3 GND
2 LowB+7V
1 LowB+7V
GND
GND
TO SIGNAL/CONVER
PD0073(BB10)
BB11
BB16P
CON DIP 8P
P811B
CON DIP 8P
P811A
2-B3
AFC_B
2-B4
ABL_B
2-E4
DF_DRV_B
AFC_A
2-B3
ABL_A
2-B4
DF_DRV_A
2-E5
① ②
1
10 us
100 V
Q801⑭
3
10 us
100 V
T862⑤
1
3

POWER/DEF(POWER)

65HDX82 Series

[SHEET-1/2]

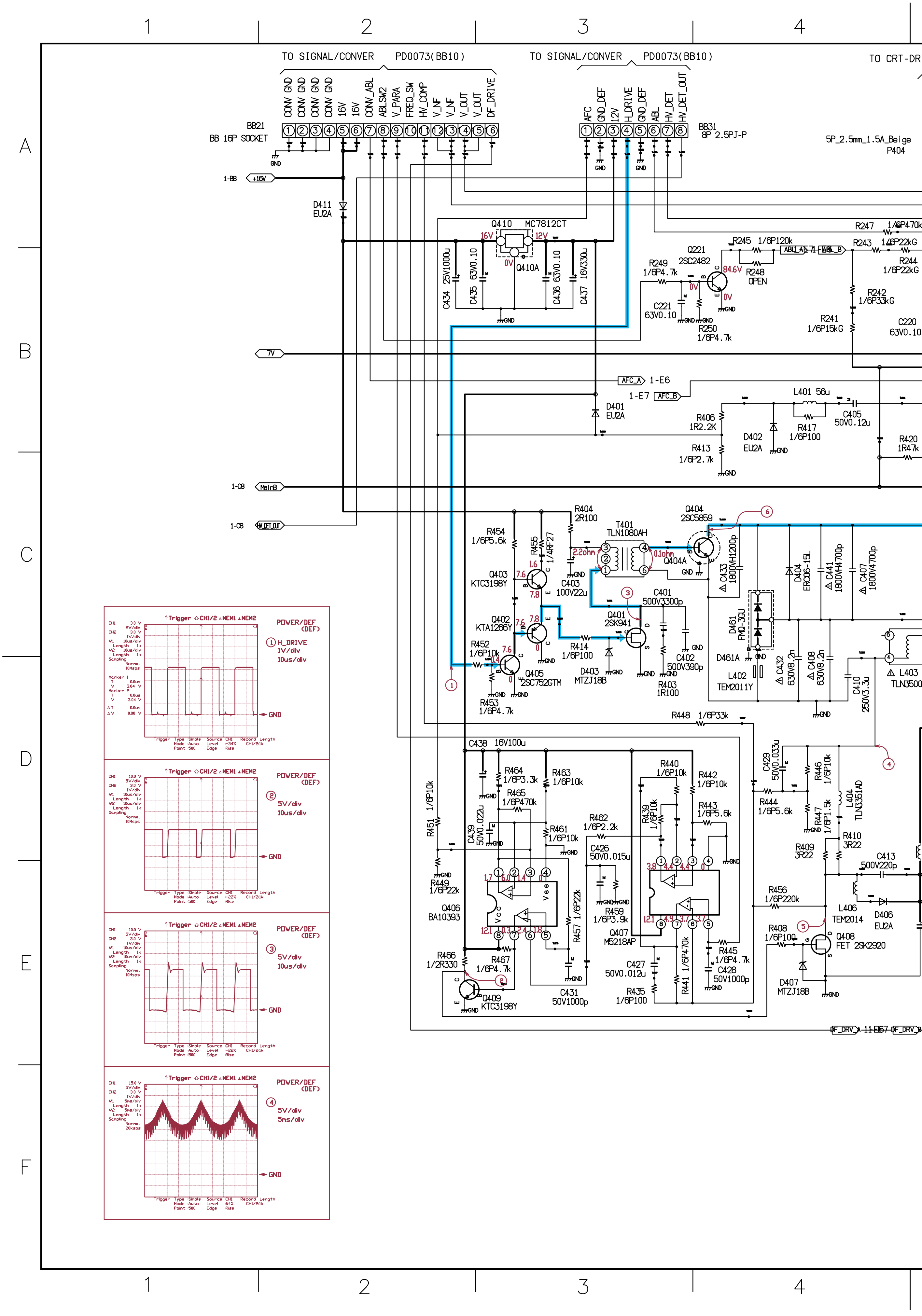


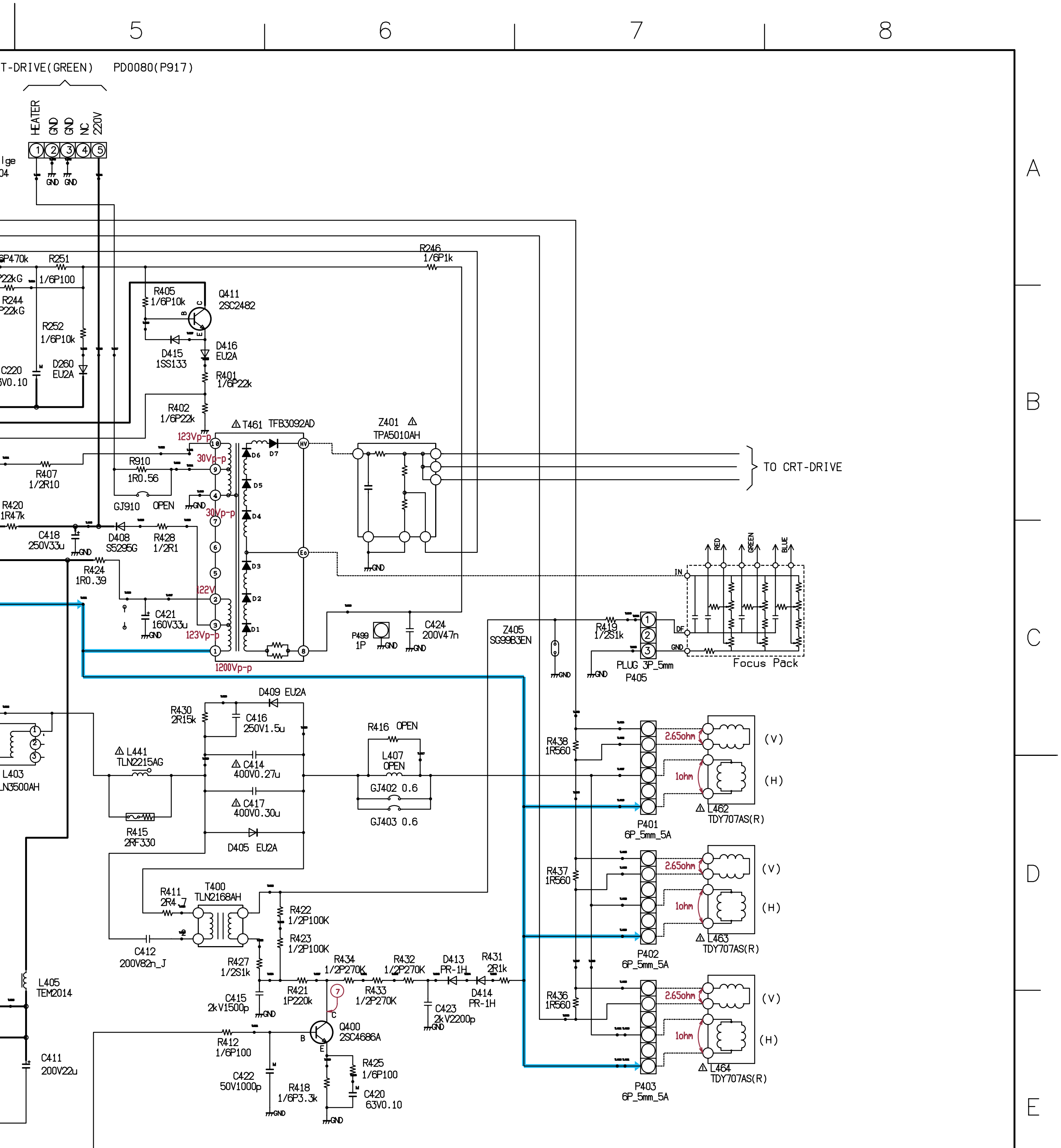
TO SIGNAL/CONVER PD0073(BB10)
CONV GND
CONV GND
CONV GND
CONV GND
16V
16V
CONV_ABL
ABLSW2
V_PARA
FREQ_SW
HV_COMP
V_NF
V_NF
V_OUT
V_OUT
DF_DRIVE
BB21
BB 16P SOCKET
TO SIGNAL/CONVER PD0073(BB10)
AFC
GND_DEF
12V
H_DRIVE
GND_DEF
ABL
HV_DET
HV_DET_OUT
BB31
8P 2.5PJ-P
TO CRT-DRIVE(GREEN) PD0080(P917)
HEATER
GND
GND
NC
220V
5P_2.5mm_1.5A_Beige
P404
D411 EU2A
Q410 MC7812CT
Q410A
C434 25V1000u
C435 63V0.10
C436 63V0.10
C437 16V330u
Q221 2SC2482
R249 1/6P4.7k
R245 1/6P120k
R248 OPEN
C221 63V0.10
R250 1/6P4.7k
R247 1/6P470k
R243 1/6P22kG
R244 1/6P22kG
R251 1/6P100
R242 1/6P33kG
R241 1/6P15kG
C220 63V0.10
R252 1/6P10k
D260 EU2A
R246 1/6P1k
R405 1/6P10k
Q411 2SC2482
D415 1SS133
D416 EU2A
R401 1/6P22k
R402 1/6P22k
T461 TFB3092AD
Z401 TPA5010AH
TO CRT-DRIVE
AFC_A 1-E6
1-E7 AFC_B
D401 EU2A
L401 56u
R406 1R2.2K
D402 EU2A
R417 1/6P100
C405 50V0.12u
R407 1/2R10
R910 1R0.56
GJ910 OPEN
R413 1/6P2.7k
R420 1R47k
C418 250V33u
D408 S5295G
R428 1/2R1
R424 1R0.39
C421 160V33u
123Vp-p
30Vp-p
122V
1200Vp-p
P499 1P
C424 200V47n
Z405 SG9B3EN
R419 1/2S1k
PLUG 3P_5mm
P405
Focus Pack
RED
GREEN
BLUE
R404 2R100
T401 TLN1080AH
Q404 2SC5859
Q404A
R454 1/6P5.6k
R455 1/4RF27
Q403 KTC3198Y
C403 100V22u
C401 500V3300p
C433 1800VH1200p
D404 ER006-15L
C441 1800VH4700p
C407 1800VH4700p
Q402 KTA1266Y
Q401 2SK941
R452 1/6P10k
R414 1/6P100
D403 MTZJ18B
C402 500V390p
R403 1R100
Q405 2SC752GTM
R453 1/6P4.7k
D461 FMQ-33U
D461A
L402 TEM2011Y
C432 630V8.2n
C408 630V8.2n
L403 TLN3500AH
C410 250V3.3u
L441 TLN2215AG
R430 2R15k
C416 250V1.5u
D409 EU2A
C414 400V0.27u
C417 400V0.30u
D405 EU2A
R416 OPEN
L407 OPEN
GJ402 0.6
GJ403 0.6
R415 2RF330
R438 1R560
R437 1R560
R436 1R560
2.65ohm
1ohm
(V)
(H)
P401 6P_5mm_5A
L462 TDY707AS(R)
P402 6P_5mm_5A
L463 TDY707AS(R)
P403 6P_5mm_5A
L464 TDY707AS(R)
R448 1/6P33k
C438 16V100u
R464 1/6P3.3k
R465 1/6P470k
R463 1/6P10k
R461 1/6P10k
R462 1/6P2.2k
C426 50V0.015u
C439 50V0.022u
R451 1/6P10k
R449 1/6P22k
Q406 BA10393
R440 1/6P10k
R442 1/6P10k
R443 1/6P5.6k
R439 1/6P10k
R459 1/6P3.9k
Q407 M5218AP
R457 1/6P22k
R441 1/6P470k
R445 1/6P4.7k
C428 50V1000p
C427 50V0.012u
R435 1/6P100
C431 50V1000p
R466 1/2R330
R467 1/6P4.7k
Q409 KTC3198Y
C429 500V0.033u
R444 1/6P5.6k
R446 1/6P10k
R447 1/6P1.5k
L404 TLN3351AD
R409 3R22
R410 3R22
C413 500V220p
L405 TEM2014
R456 1/6P220k
L406 TEM2014
D406 EU2A
C411 200V22u
R408 1/6P100
Q408 FET 2SK2920
D407 MTZJ18B
R411 2R4.7
T400 TLN2168AH
R422 1/2P100K
R423 1/2P100K
C412 200V82n_J
R427 1/2S1k
R434 1/2P270K
R432 1/2P270K
R433 1/2P270K
D413 PR-1H
D414 PR-1H
R431 2R1k
R421 1P220k
C415 2kV1500p
C423 2kV2200p
Q400 2SC4686A
R412 1/6P100
C422 50V1000p
R418 1/6P3.3k
R425 1/6P100
C420 63V0.10
1-B8 +16V
7V
1-C8 MainB
1-C8 V_DET_OUT
DF_DRV 11-E6 DF_DRV
GND
POWER/DEF (DEF)
① H_DRIVE 1V/div 10us/div
② 5V/div 10us/div
③ 5V/div 10us/div
④ 5V/div 5ms/div
⑤ 50V/div 10us/div
⑥ 200V/div 10us/div
⑦ 200V/div 5ms/div
Trigger CH1/2 MEM1 MEM2

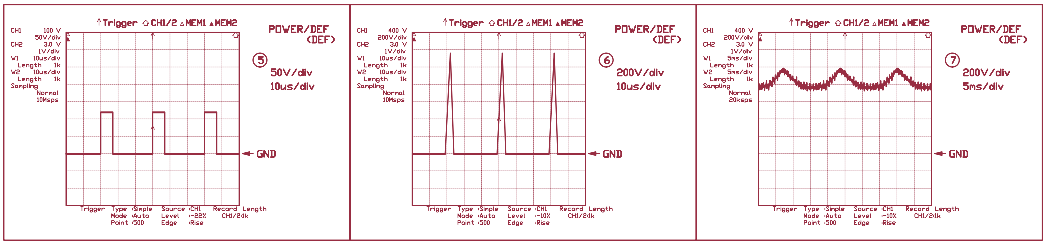
POWER/DEF(DEF)

65HDX82 Series

[SHEET-2/2]

1
2
3
4
A
B
C
D
E
F
TO SIGNAL/CONVER PD0073(BB10)
CONV GND
CONV GND
CONV GND
CONV GND
16V
16V
CONV_ABL
ABLSW2
V_PARA
FREQ_SW
HV_COMP
V_NF
V_NF
V_OUT
V_OUT
DF_DRIVE
BB21
BB 16P SOCKET
TO SIGNAL/CONVER PD0073(BB10)
AFC
GND_DEF
12V
H_DRIVE
GND_DEF
ABL
HV_DET
HV_DET_OUT
BB31
8P 2.5PJ-P
TO CRT-DR
5P_2.5mm_1.5A_Belge
P404
GND
1-B8
+16V
D411
EU2A
Q410 MC7812CT
16V
12V
0V
Q410A
C434 25V1000u
C435 63V0.10
C436 63V0.10
C437 16V330u
R245 1/6P120k
Q221
2SC2482
84.6V
R248
OPEN
R249
1/6P4.7k
0V
0V
C221
63V0.10
R250
1/6P4.7k
R247 1/6P470k
R243 1/6P22kG
R244
1/6P22kG
ABL1_A
ABL_B
R242
1/6P33kG
R241
1/6P15kG
C220
63V0.10
7V
AFC_A 1-E6
1-E7 AFC_B
D401
EU2A
L401 56u
R406
1R2.2K
D402
EU2A
R417
1/6P100
C405
50V0.12u
R413
1/6P2.7k
R420
1R47k
1-C8
MainB
1-C8
HV DET OUT
R404
2R100
R454
1/6P5.6k
R455
1/4RF27
T401
TLN1080AH
Q404
2SC5859
Q404A
2.2ohm
0.1ohm
Q403
KTC3198Y
7.6
1.6
7.8
C403
100V22u
C433
1800VH1200p
D404
ERC06-15L
C441
1800VH4700p
C407
1800V4700p
C401
500V3300p
Q401
2SK941
Q402
KTA1266Y
7.6
7.8
R414
1/6P100
C402
500V390p
D461
FMQ-33U
D461A
R452
1/6P10k
7.6
1.4
0
Q405
2SC752GTM
D403
MTZJ18B
R403
1R100
L402
TEM2011Y
C432
630V8.2n
C408
630V8.2n
C410
250V3.3u
L403
TLN3500
R453
1/6P4.7k
R448 1/6P33k
C438 16V100u
R464
1/6P3.3k
R463
1/6P10k
R440
1/6P10k
R442
1/6P10k
C429
50V0.033u
R446
1/6P10k
R451 1/6P10k
R465
1/6P470k
R439
1/6P10k
R443
1/6P5.6k
R444
1/6P5.6k
L404
TLN3351AD
R447 1/6P1.5k
C439
50V0.022u
R461
1/6P10k
R462
1/6P2.2k
C426
50V0.015u
R410
3R22
R409
3R22
C413
500V220p
R449
1/6P22k
1.7
6.0
1.4
0
3.8
4.4
4.4
0
Vee
Vcc
Q406
BA10393
12.1
0.3
2.4
1.8
R457 1/6P22k
R459
1/6P3.9k
12.1
4.9
3.7
3.7
Q407
M5218AP
R456
1/6P220k
L406
TEM2014
D406
EU2A
R408
1/6P100
Q408
FET 2SK2920
R466
1/2R330
R467
1/6P4.7k
C427
50V0.012u
R441 1/6P470k
R445
1/6P4.7k
C428
50V1000p
D407
MTZJ18B
Q409
KTC3198Y
C431
50V1000p
R435
1/6P100
DF_DRV 1-E7 DF_DRV
①
②
③
④
⑤
⑥
POWER/DEF (DEF)
① H_DRIVE
1V/div
10us/div
GND
POWER/DEF (DEF)
②
5V/div
10us/div
GND
POWER/DEF (DEF)
③
5V/div
10us/div
GND
POWER/DEF (DEF)
④
5V/div
5ms/div
GND
Trigger CH1/2 MEM1 MEM2


5
6
7
8
A
B
C
D
E
T-DRIVE(GREEN)
PD0080(P917)
HEATER
GND
GND
NC
220V
GND GND
R251
1/6P100
R244
R252
1/6P10k
C220
D260
EU2A
R405
1/6P10k
Q411
2SC2482
D416
EU2A
D415
1SS133
R401
1/6P22k
R402
1/6P22k
R246
1/6P1k
T461 TFB3092AD
Z401
TPA5010AH
123Vp-p
30Vp-p
30Vp-p
122V
123Vp-p
1200Vp-p
R910
1R0.56
R407
1/2R10
GJ910 OPEN
R420
1R47k
C418
250V33u
D408
S5295G
R428
1/2R1
R424
1R0.39
C421
160V33u
P499
1P
C424
200V47n
TO CRT-DRIVE
RED
GREEN
BLUE
IN
DF
GND
Focus Pack
Z405
SG99B3EN
R419
1/2S1k
PLUG 3P_5mm
P405
D409 EU2A
R430
2R15k
C416
250V1.5u
L441
TLN2215AG
C414
400V0.27u
C417
400V0.30u
R415
2RF330
D405 EU2A
L403
N3500AH
R416 OPEN
L407
OPEN
GJ402 0.6
GJ403 0.6
R438
1R560
2.65ohm
1ohm
(V)
(H)
L462
TDY707AS(R)
P401
6P_5mm_5A
R437
1R560
L463
TDY707AS(R)
P402
6P_5mm_5A
R436
1R560
L464
TDY707AS(R)
P403
6P_5mm_5A
T400
TLN2168AH
R411
2R4.7
R422
1/2P100K
R423
1/2P100K
C412
200V82n_J
R427
1/2S1k
R434
1/2P270K
R432
1/2P270K
D413
PR-1H
R431
2R1k
D414
PR-1H
R421
1P220k
R433
1/2P270K
C415
2kV1500p
C423
2kV2200p
L405
TEM2014
Q400
2SC4686A
R412
1/6P100
C411
200V22u
C422
50V1000p
R418
1/6P3.3k
R425
1/6P100
C420
63V0.10
_DRV
GND

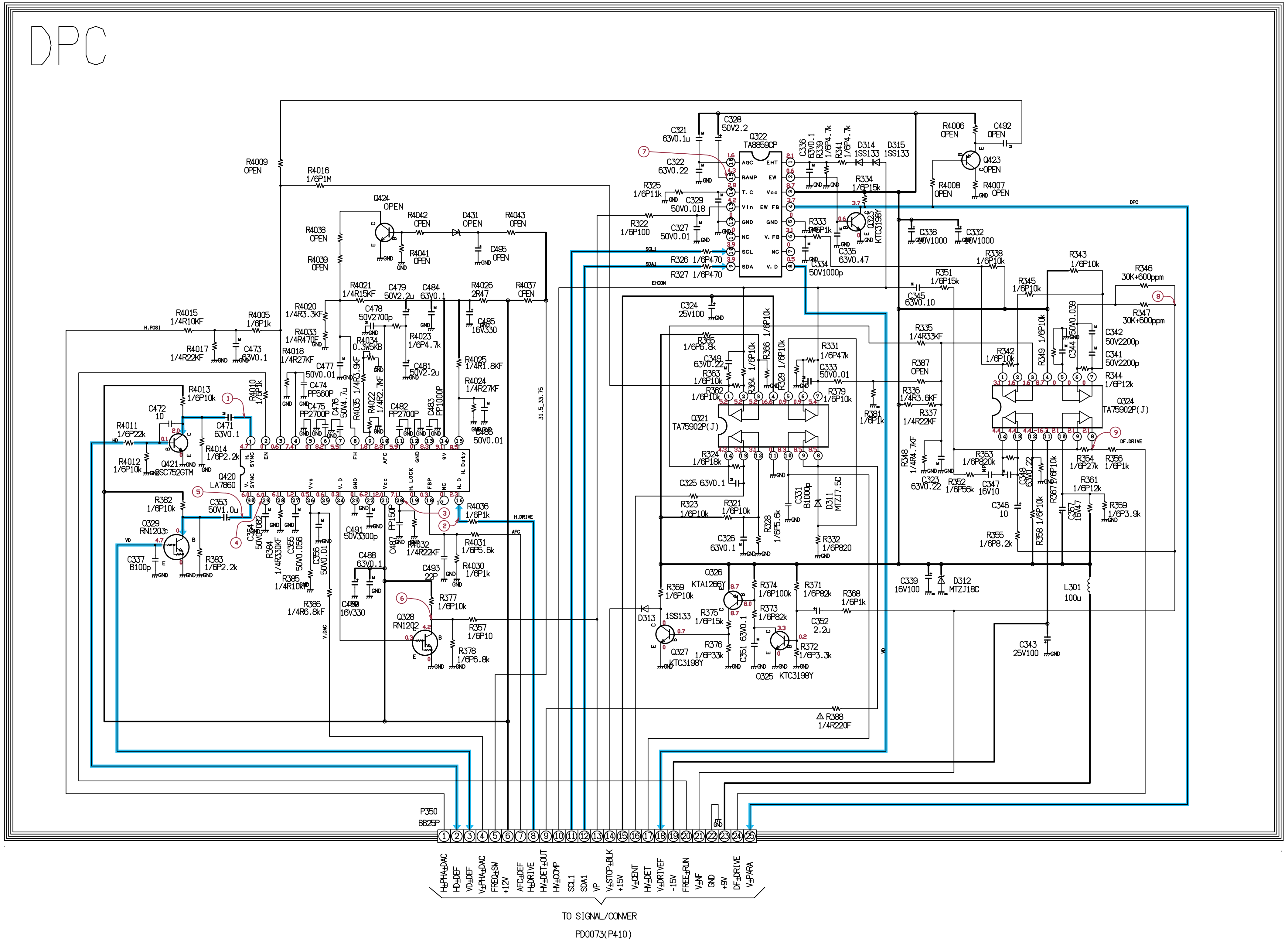


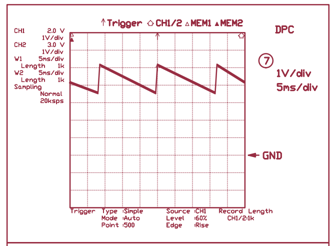
F

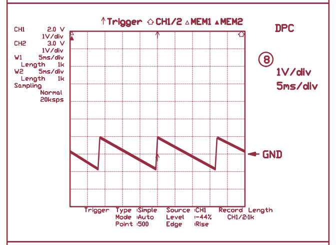
POWER/DEF(DEF)

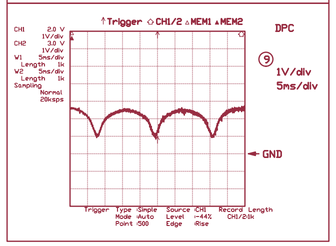
65HDX82 Series

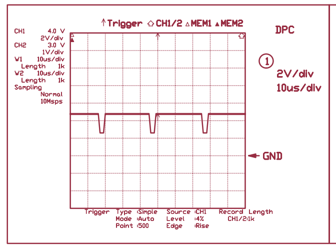
[SHEET-2/2]

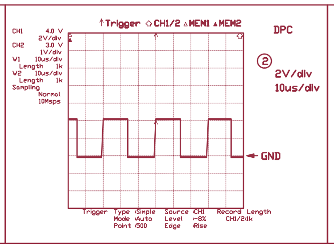

DPC
Q322
TA8859CP
AGC
RAMP
T.C
V In
GND
NC
SCL
SDA
EHT
EW
Vcc
EW FB
GND
V. FB
NC
V. D
C321
63V0.1u
C328
50V2.2
C322
63V0.22
R325
1/6P11k
C329
50V0.018
R322
1/6P100
C327
50V0.01
R326 1/6P470
R327 1/6P470
C336
63V0.1
R339 1/6P4.7k
R341 1/6P4.7k
D314
1SS133
D315
1SS133
R334
1/6P15k
R333
1/6P1k
Q323
KTC3198Y
C334
50V1000p
C335
63V0.47
R4006
OPEN
C492
OPEN
Q423
OPEN
R4008
OPEN
R4007
OPEN
C338
50V1000
C332
50V1000
R338
1/6P10k
R343
1/6P10k
R346
30K+600ppm
R347
30K+600ppm
R351
1/6P15k
R345
1/6P10k
C345
63V0.10
R335
1/4R33KF
R387
OPEN
R336
1/4R3.6KF
R337
1/4R22KF
R342
1/6P10k
R349 1/6P10k
C344 50V0.039
C342
50V2200p
C341
50V2200p
R344
1/6P12k
Q324
TA75902P(J)
DF.DRIVE
R348
1/4R4.7KF
R353
1/6P820k
C323
63V0.22
R352
1/6P56k
C347
16V10
C348 63V0.22
R367 1/6P10k
R354
1/6P27k
R356
1/6P1k
R361
1/6P12k
C346
10
R358 1/6P10k
C357 16V47
R359
1/6P3.9k
R355
1/6P8.2k
C339
16V100
D312
MTZJ18C
L301
100u
C343
25V100
C324
25V100
R365
1/6P6.8k
C349
63V0.22
R363
1/6P10k
R362
1/6P10k
R364 1/6P10k
R366 1/6P10k
R329 1/6P10k
R331
1/6P47k
C333
50V0.01
R379
1/6P10k
R381
1/6P1k
Q321
TA75902P(J)
R324
1/6P18k
C325 63V0.1
C331 B1000p
D311 MTZJ7.5C
R323
1/6P10k
R321
1/6P10k
R328 1/6P5.6k
C326
63V0.1
R332
1/6P820
Q326
KTA1266Y
R369
1/6P10k
R374
1/6P100k
R371
1/6P82k
R368
1/6P1k
D313
1SS133
R375
1/6P15k
R373
1/6P82k
C352
2.2u
C351 63V0.1
R376
1/6P33k
R372
1/6P3.3k
Q327
KTC3198Y
Q325 KTC3198Y
R388
1/4R220F
R4009
OPEN
R4016
1/6P1M
Q424
OPEN
R4042
OPEN
D431
OPEN
R4043
OPEN
R4038
OPEN
R4041
OPEN
C495
OPEN
R4039
OPEN
R4021
1/4R15KF
C479
50V2.2u
C484
63V0.1
R4026
2R47
R4037
OPEN
R4015
1/4R10KF
R4005
1/6P1k
R4020
1/4R3.3KF
C478
50V2700p
R4033
1/4R470K
R4034
0.3KKB
R4023
1/6P4.7k
C485
16V330
R4017
1/4R22KF
C473
63V0.1
R4018
1/4R27KF
C477
50V0.01
C481
50V2.2u
R4025
1/4R1.8KF
R4024
1/4R27KF
R4013
1/6P10k
R4010
1/6P1k
C474
PP560P
C475
PP2700P
C476
50V4.7u
R4035 1/4R3.9KF
R4022 1/4R2.7KF
C482
PP2700P
C483
PP1000P
C486
50V0.01
C472
10
C471
63V0.1
R4011
1/6P22k
Q421
2SC752GTM
R4014
1/6P2.2k
R4012
1/6P10k
Q420
LA7860
H.SYNC
V.SYNC
Vcc
V.D
GND
AFC
Vcc
H.LOCK
FBP
H.Duty
R382
1/6P10k
C353
50V1.0u
Q329
RN1203
C354 50V0.022
C355 50V0.056
C356 50V0.01
R384 1/4R330KF
R385
1/4R10KF
R386
1/4R5.6KF
C337
B100p
R383
1/6P2.2k
C491
50V3300p
C487 PP150P
R4032
1/4R22KF
R4036
1/6P1k
R4031
1/6P5.6k
R4030
1/6P1k
C488
63V0.1
C493
22P
C489
16V330
R377
1/6P10k
Q328
RN1202
R357
1/6P10
R378
1/6P6.8k
H.POS1
HD
VD
V.DAC
H.DRIVE
AFC
SCL1
SDA1
EHCOM
DPC
VP
GND
P350
BB25P
H±PHA±DAC
HD±DEF
VD±DEF
V±PHA±DAC
FREQ±SW
+12V
AFC±DEF
H±DRIVE
HV±DET±OUT
HV±COMP
SCL1
SDA1
VP
V±STOP±BLK
+15V
V±CENT
HV±DET
V±DRIVEF
-15V
FREE±RUN
V±NF
GND
+9V
DF±DRIVE
V±PARA
TO SIGNAL/CONVER
PD0073(P410)

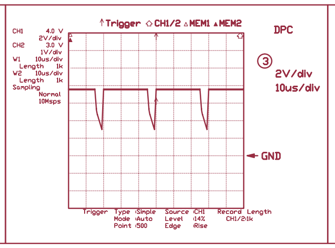


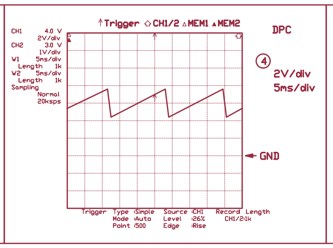


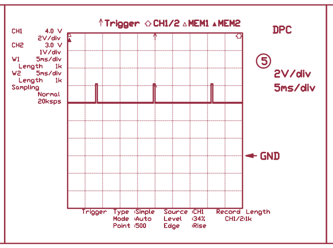


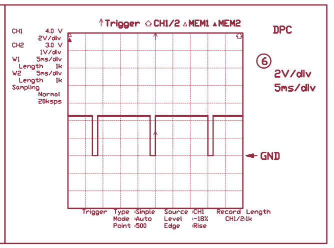








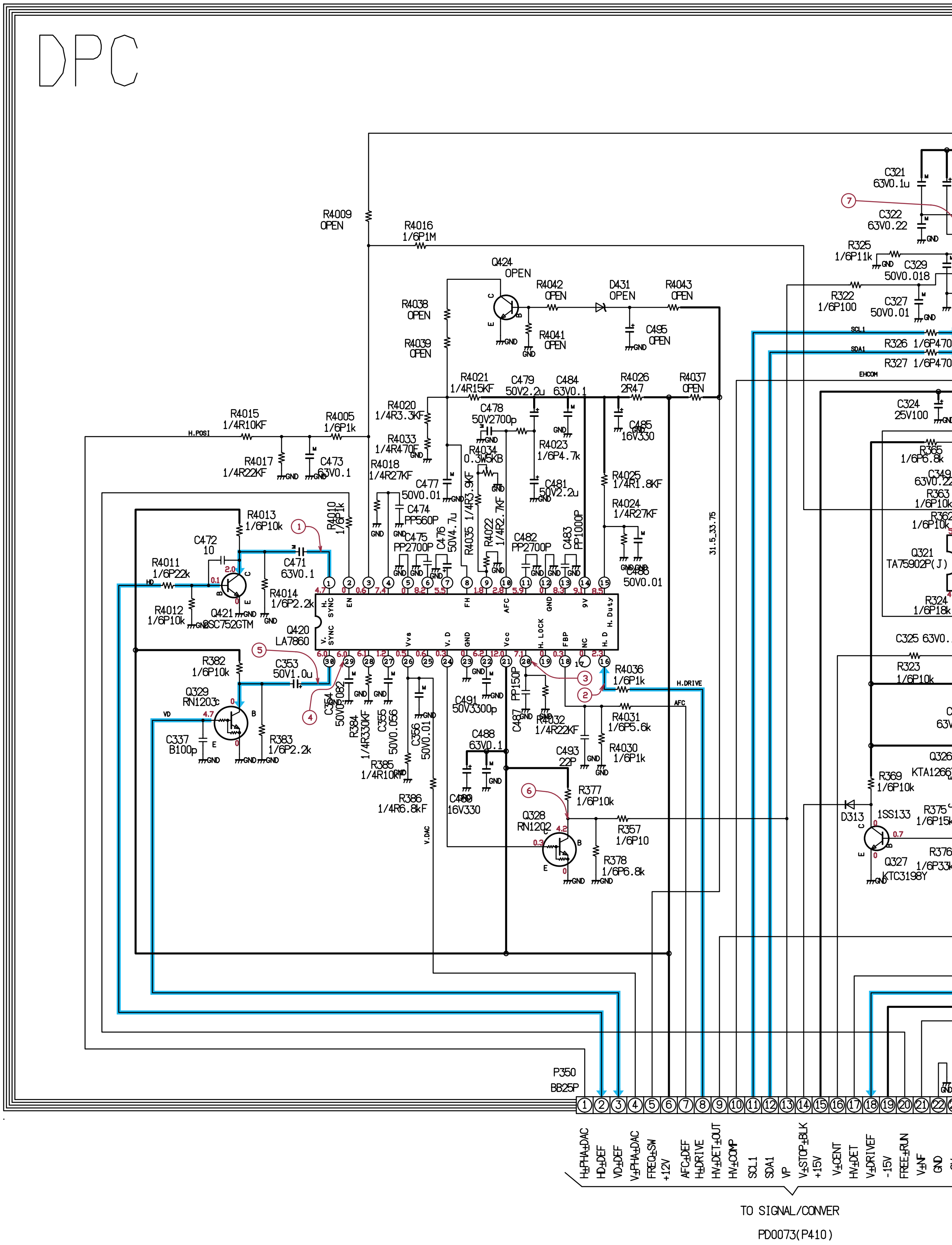


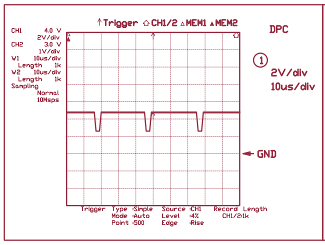


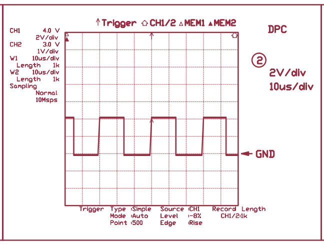
DPC

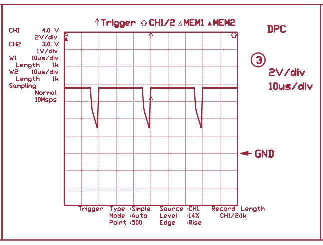
65HDX82 Series

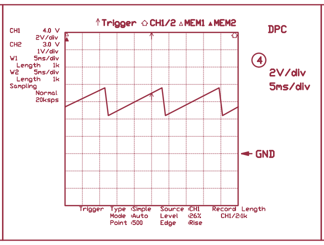
DPC

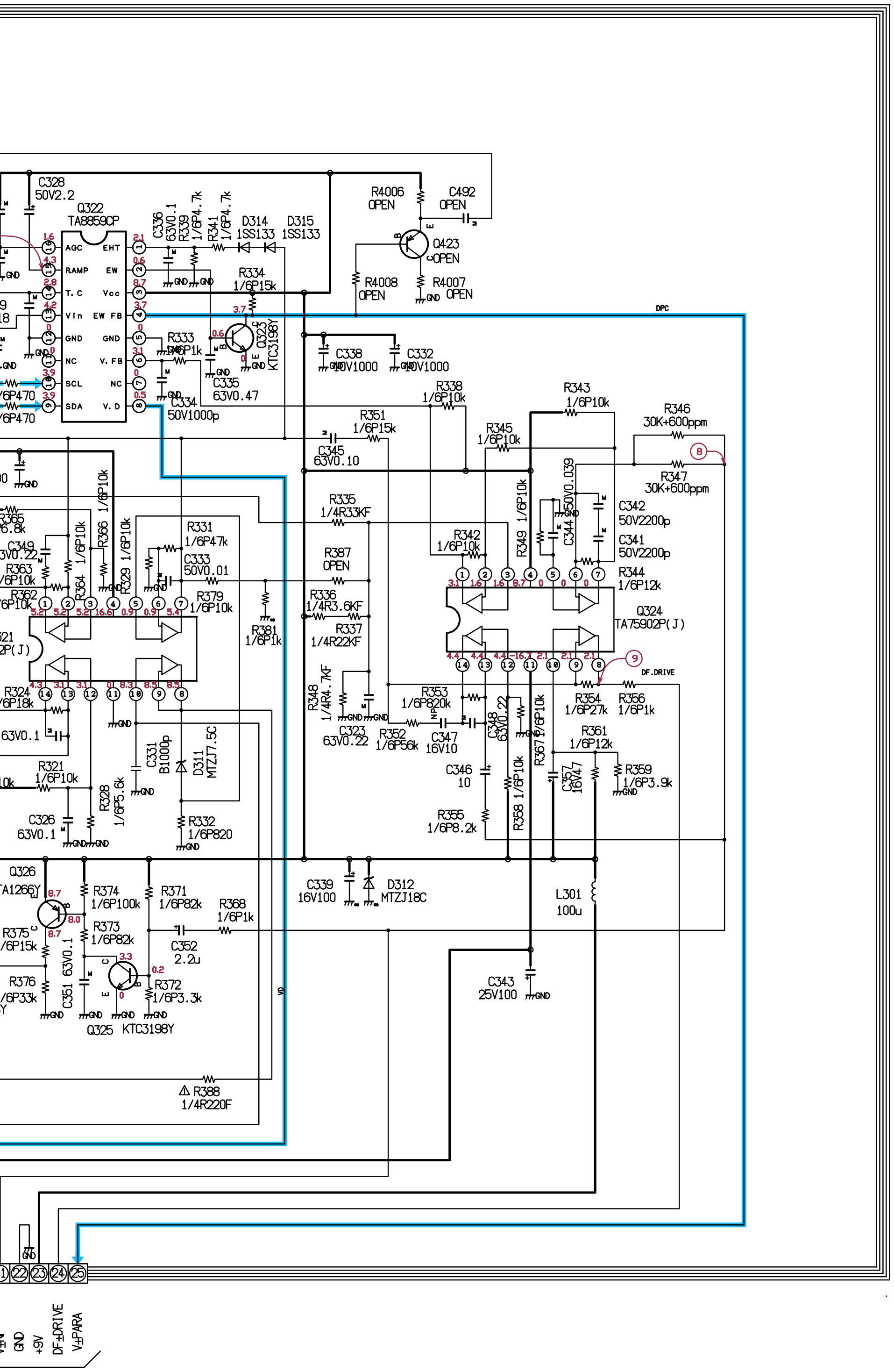

R4009 OPEN
R4016 1/6P1M
Q424 OPEN
R4038 OPEN
R4039 OPEN
R4042 OPEN
D431 OPEN
R4043 OPEN
R4041 OPEN
C495 OPEN
R4021 1/4R15KF
C479 50V2.2u
C484 63V0.1
R4026 2R47
R4037 OPEN
R4020 1/4R3.3KF
C478 50V2700p
R4033 1/4R470F
R4034 0.3W5KB
R4023 1/6P4.7k
C485 16V330
R4015 1/4R10KF
R4005 1/6P1k
H.POSI
R4017 1/4R22KF
C473 63V0.1
R4018 1/4R27KF
C477 50V0.01
C481 50V2.2u
R4025 1/4R1.8KF
R4024 1/4R27KF
R4013 1/6P10k
R4010 1/6P1k
C474 PP560P
C475 PP2700P
C476 50V4.7u
R4035 1/4R3.9KF
R4022 1/4R2.7KF
C482 PP2700P
C483 PP1000P
C486 50V0.01
C472 10
C471 63V0.1
R4011 1/6P22k
HD
R4014 1/6P2.2k
R4012 1/6P10k
Q421 2SC752GTM
Q420 LA7860
H. SYNC
EN
FH
AFC
GND
9V
H. Duty
V. SYNC
Vvs
V. D
GND
Vcc
H. LOCK
FBP
NC
H. D
R382 1/6P10k
C353 50V1.0u
Q329 RN1203
VD
C337 B100p
R383 1/6P2.2k
C354 50V0.082
R384 1/4R330KF
C355 50V0.056
C356 50V0.01
R385 1/4R10KF
R386 1/4R6.8kF
C491 50V3300p
C487 PP150P
R4032 1/4R22KF
R4036 1/6P1k
H.DRIVE
AFC
R4031 1/6P5.6k
R4030 1/6P1k
C488 63V0.1
C493 22P
C489 16V330
Q328 RN1202
R377 1/6P10k
R357 1/6P10
R378 1/6P6.8k
V.DAC
31.5,33.75
C321 63V0.1u
C322 63V0.22
R325 1/6P11k
C329 50V0.018
R322 1/6P100
C327 50V0.01
SCL1
SDA1
R326 1/6P470
R327 1/6P470
EHCOM
C324 25V100
R365 1/6P6.8k
C349 63V0.22
R363 1/6P10k
R362 1/6P10k
Q321 TA75902P(J)
R324 1/6P18k
C325 63V0.
R323 1/6P10k
Q326 KTA1266
R369 1/6P10k
D313 1SS133
R375 1/6P15k
R376 1/6P33k
Q327 KTC3198Y
P350 BB25P
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
H±PHA±DAC
HD±DEF
VD±DEF
V±PHA±DAC
FREQ±SW
+12V
AFC±DEF
H±DRIVE
HV±DET±OUT
HV±COMP
SCL1
SDA1
VP
V±STOP±BLK
+15V
V±CENT
HV±DET
V±DRIVEF
-15V
FREE±RUN
V±NF
GND
TO SIGNAL/CONVER
PD0073(P410)

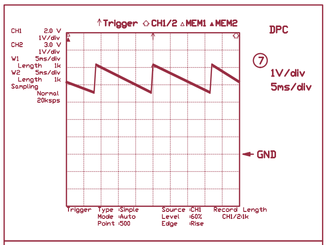

Trigger CH1/2 MEM1 MEM2
DPC
①
2V/div
10us/div
GND

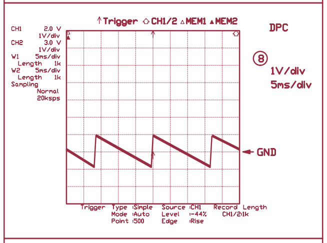

Trigger CH1/2 MEM1 MEM2
DPC
②
2V/div
10us/div
GND

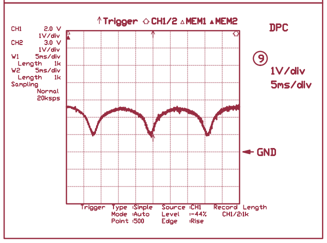

Trigger CH1/2 MEM1 MEM2
DPC
③
2V/div
10us/div
GND

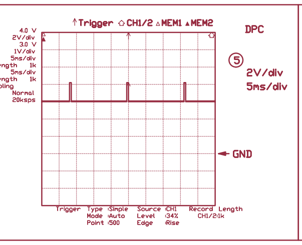

Trigger CH1/2 MEM1 MEM2
DPC
④
2V/div
5ms/div
GND

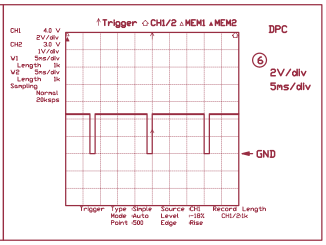

C328
50V2.2
Q322
TA8859CP
AGC
RAMP
T. C
V In
GND
NC
SCL
SDA
EHT
EW
Vcc
EW FB
GND
V. FB
NC
V. D
C336
63V0.1
R339
1/6P4.7k
R341
1/6P4.7k
D314
1SS133
D315
1SS133
R334
1/6P15k
R333
1/6P1k
Q323
KTC3198Y
C335
63V0.47
C334
50V1000p
R4006
OPEN
C492
OPEN
Q423
OPEN
R4008
OPEN
R4007
OPEN
DPC
C338
50V1000
C332
50V1000
R338
1/6P10k
R343
1/6P10k
R346
30K+600ppm
R351
1/6P15k
R345
1/6P10k
C345
63V0.10
R347
30K+600ppm
⑧
R335
1/4R33KF
C342
50V2200p
C344
50V0.039
C341
50V2200p
R387
OPEN
R342
1/6P10k
R349
1/6P10k
R344
1/6P12k
R336
1/4R3.6KF
R337
1/4R22KF
Q324
TA75902P(J)
R331
1/6P47k
C333
50V0.01
R379
1/6P10k
R381
1/6P1k
C349
R363
1/6P10k
R362
1/6P10k
R364
1/6P10k
R366
1/6P10k
R329
1/6P10k
R324
1/6P18k
⑨
DF.DRIVE
R348
1/4R4.7KF
R353
1/6P820k
R354
1/6P27k
R356
1/6P1k
C323
63V0.22
R352
1/6P56k
C347
16V10
C348
63V0.22
R367
1/6P10k
R361
1/6P12k
C346
10
C357
16V47
R359
1/6P3.9k
R358
1/6P10k
R355
1/6P8.2k
63V0.1
R321
1/6P10k
C331
B1000p
D311
MTZJ7.5C
R328
1/6P5.6k
C326
63V0.1
R332
1/6P820
Q326
TA1266Y
R374
1/6P100k
R371
1/6P82k
R368
1/6P1k
C339
16V100
D312
MTZJ18C
L301
100u
R375
1/6P15k
R373
1/6P82k
C352
2.2u
R376
1/6P33k
C351
63V0.1
R372
1/6P3.3k
Q325
KTC3198Y
C343
25V100
R388
1/4R220F
GND
22
23
24
25
GND
+9V
DF±DRIVE
V±PARA





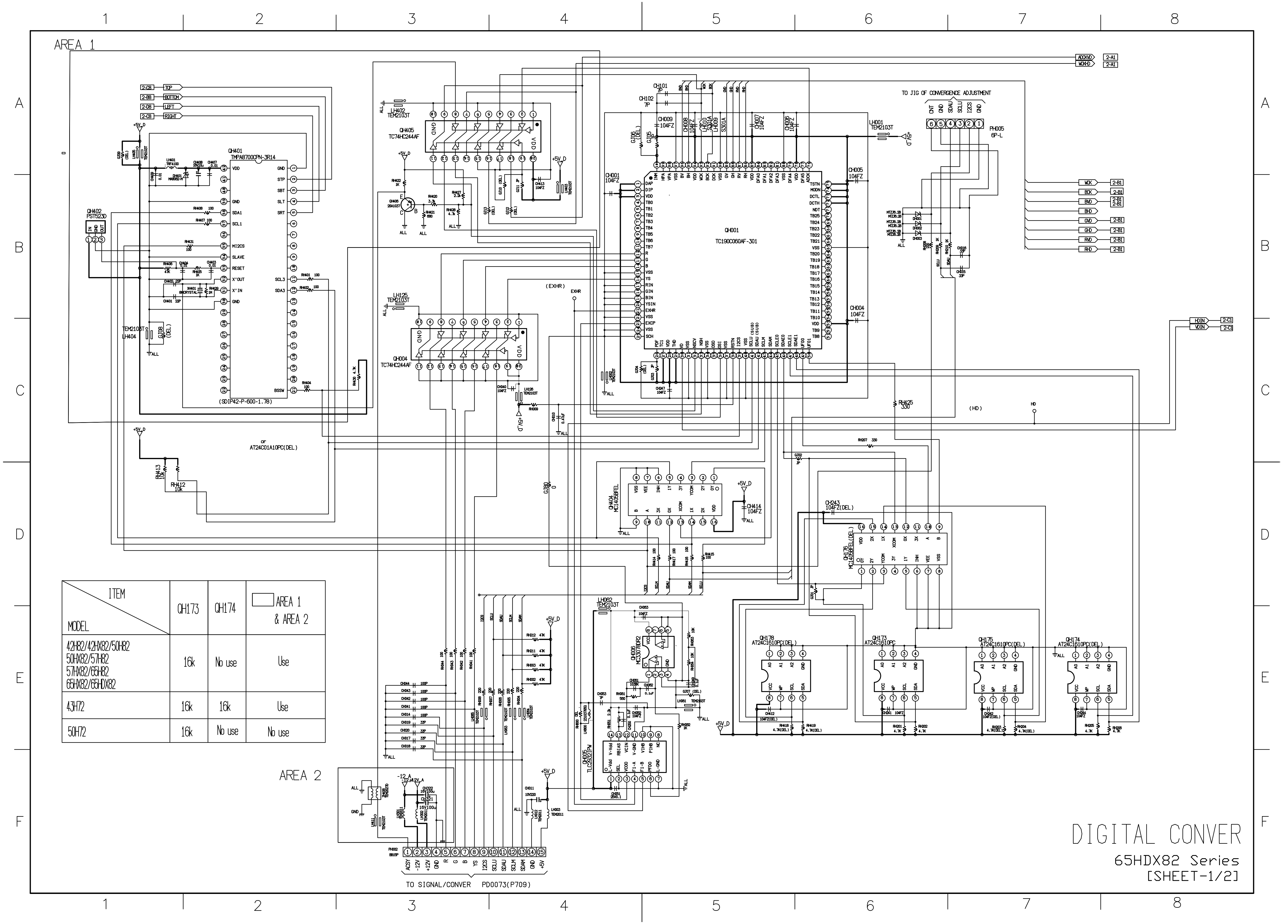






DPC

65HDX82 Series

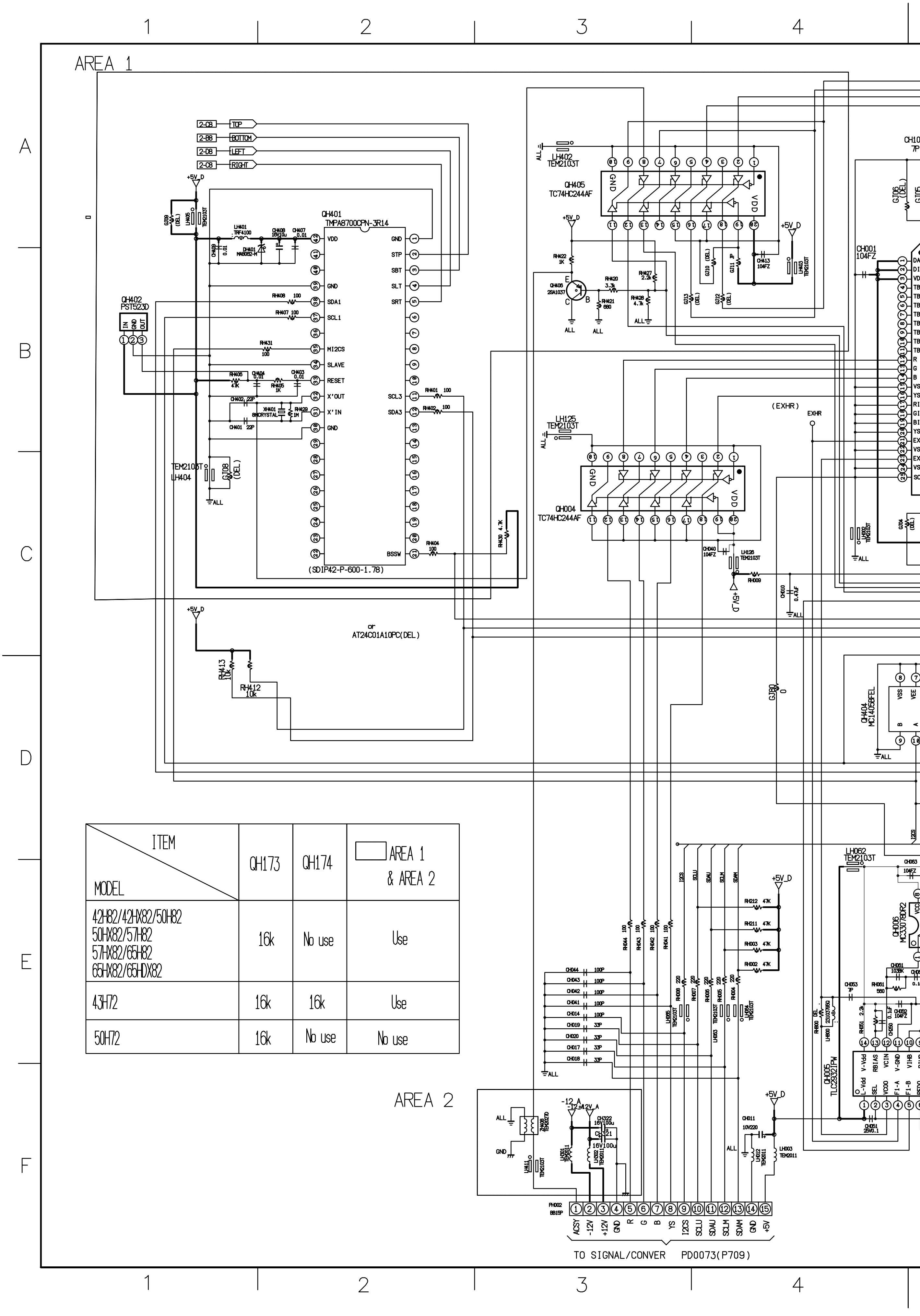

AREA 1
AREA 2
QH401
TMPA8700CPN-3R14
(SDIP42-P-600-1.78)
QH402
PST5230
QH405
TC74HC244AF
QH004
TC74HC244AF
QH001
TC190C060AF-301
QH404
MC14052FEL
QH176
MC14052FEL(DEL)
QH178
AT24C1610PC(DEL)
QH173
AT24C1610PC
QH175
AT24C1610PC(DEL)
QH174
AT24C1610PC(DEL)
QH006
MC33078DR2
QH005
TLC2932IPW
or
AT24C01A10PC(DEL)
TO JIG OF CONVERGENCE ADJUSTMENT
PH005
6P-L
CNT
GND
SDAU
SCLU
I2CS
GND
TOP
BOTTOM
LEFT
RIGHT
WCK
BCK
BHD
GVD
GHD
RVD
RHD
HDIN
VDIN
ADCKHD
WCKHD
2-A1
2-B1
2-C1
2-C8
(EXHR)
EXHR
(HD)
HD
+5V_D
ALL
PH002
8B15P
ACSY
-12V
+12V
GND
R
G
B
YS
I2CS
SCLU
SDAU
SCLM
SDAM
GND
+5V
TO SIGNAL/CONVER PD0073(P709)
1
2
3
4
5
6
7
8
A
B
C
D
E
F

ITEM / MODEL	QH173	QH174	AREA 1 & AREA 2
42H82/42HX82/50H82 50HX82/57H82 57HX82/65H82 65HX82/65HDX82	16k	No use	Use
43H72	16k	16k	Use
50H72	16k	No use	No use

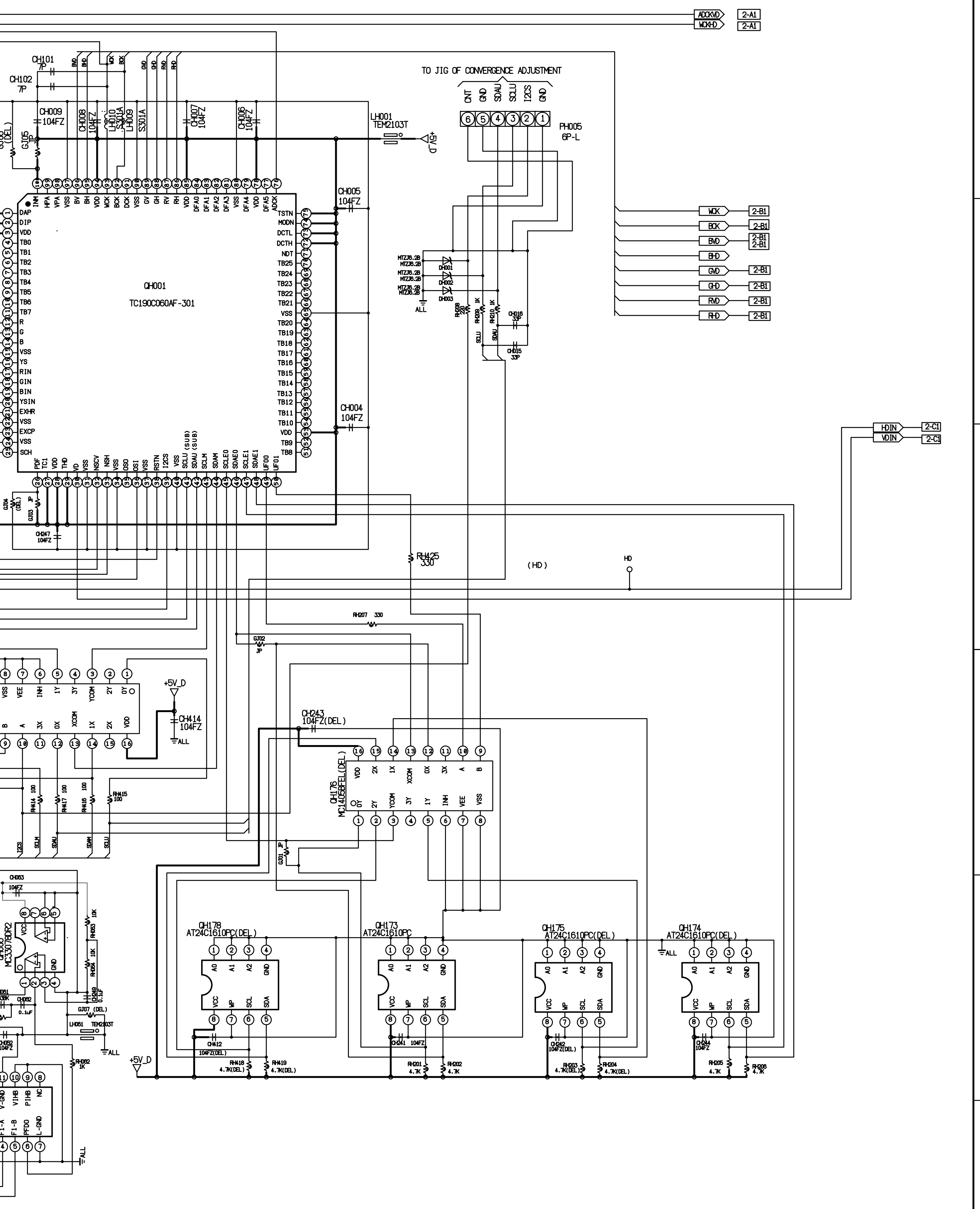
DIGITAL CONVER

65HDX82 Series

[SHEET-1/2]


1
2
3
4
A
B
C
D
E
F
AREA 1
AREA 2
2-C8 TOP
2-B8 BOTTOM
2-D8 LEFT
2-C8 RIGHT
+5V_D
QH401
TMPA8700CPN-3R14
VDD
GND
SDA1
SCL1
MI2CS
SLAVE
RESET
X'OUT
X'IN
STP
SBT
SLT
SRT
SCL3
SDA3
BSSW
(SDIP42-P-600-1.78)
QH402
PST523D
IN
GND
OUT
LH401
TRF4100
DH401
MA8062-M
X401
8MCRYSTAL
RH430 4.7K
TEM2103T
LH404
GJ08
(DEL)
or
AT24C01A10PC(DEL)
RH413
10k
RH412
10k
LH402
TEM2103T
QH405
TC74HC244AF
QH406
2SA1037
LH125
TEM2103T
QH004
TC74HC244AF
(EXHR)
EXHR
CH001
104FZ
GJ80
0
QH404
MC14053BFEL
LH062
TEM2103T
QH006
MC33078DR2
QH005
TLC2932IPW
-12_A
+12V_A
+5V_D
ALL
GND
PH002
BB15P
ACSY
-12V
+12V
GND
R
G
B
YS
I2CS
SCLU
SDAU
SCLM
SDAM
GND
+5V
TO SIGNAL/CONVER PD0073(P709)

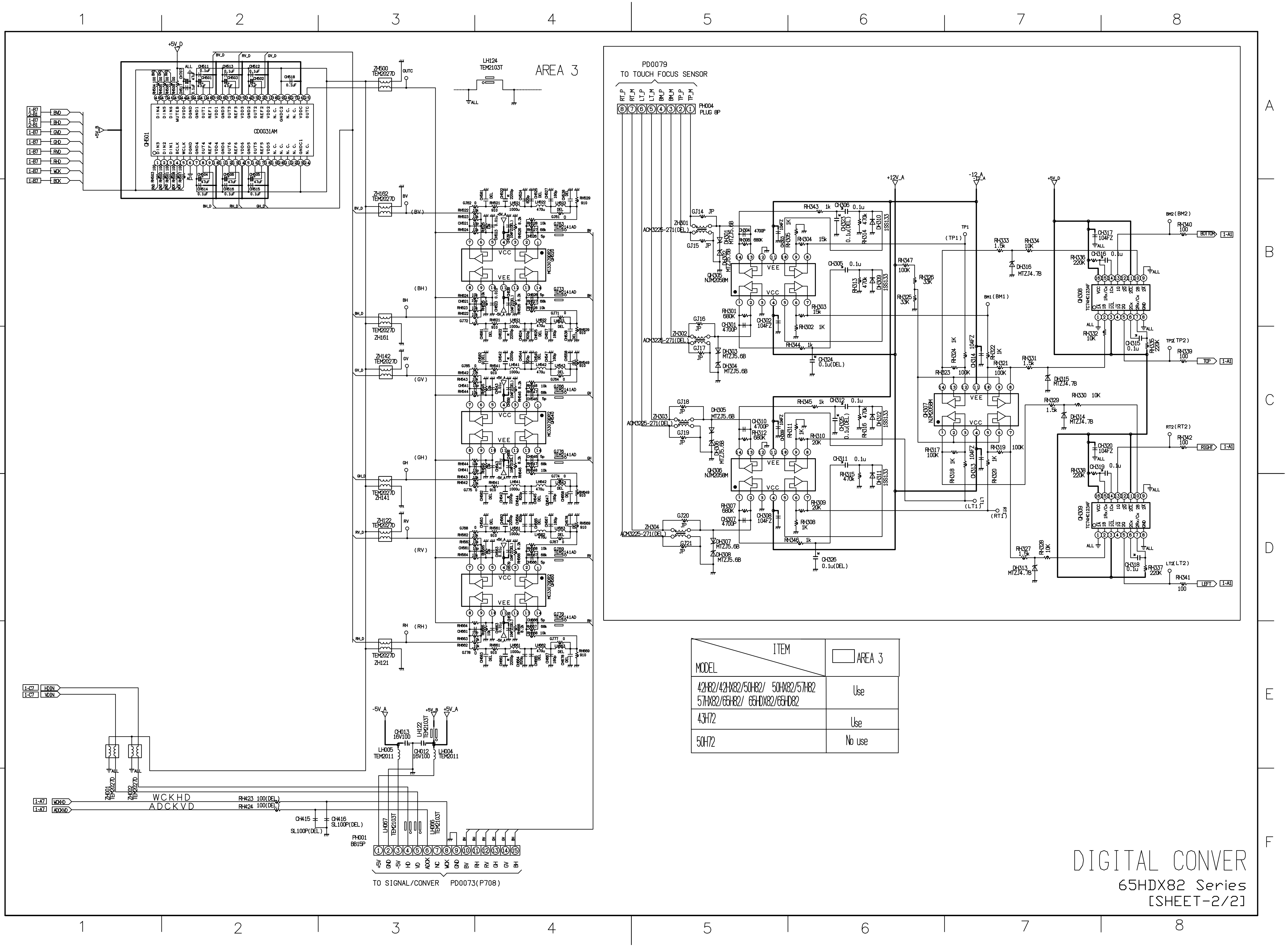
ITEM MODEL	QH173	QH174	AREA 1 & AREA 2
42H82/42HX82/50H82 50HX82/57H82 57HX82/65H82 65HX82/65HDX82	16k	No use	Use
43H72	16k	16k	Use
50H72	16k	No use	No use


5
6
7
8
A
B
C
D
E
F
ADCKVD
WCKHD
2-A1
TO JIG OF CONVERGENCE ADJUSTMENT
CNT
GND
SDAU
SCLU
I2CS
PH005
6P-L
LH001
TEM2103T
+5V_D
CH101 7P
CH102 7P
CH009 104FZ
CH008 104FZ
CH007 104FZ
CH006 104FZ
CH005 104FZ
CH004 104FZ
LH010
LH009
S301A
GJ05 JP
QH001
TC190C060AF-301
TSTN
MODN
DCTL
DCTH
NDT
TB25
TB24
TB23
TB22
TB21
VSS
TB20
TB19
TB18
TB17
TB16
TB15
TB14
TB13
TB12
TB11
TB10
VDD
TB9
TB8
DAP
DIP
TB0
TB1
TB2
TB3
TB4
TB5
TB6
TB7
R
G
B
YS
RIN
GIN
BIN
YSIN
EXHR
EXCP
SCH
INH
HPA
VPA
BH
BV
WCK
BCK
DCK
GV
GH
RV
RH
DFA0
DFA1
DFA2
DFA3
DFA4
DFA5
ADCK
PDF
TC1
THD
VD
NSCV
NSH
OS0
OS1
RSTN
I2CS
SCLU (SUB)
SDAU (SUB)
SCLM
SDAM
SCLE0
SDAE0
SCLE1
SDAE1
UFO0
UFO1
DH001
DH002
DH003
MTZJ6.2B
ALL
RH208 220
RH209 1K
RH210 1K
CH016 33P
CH015 33P
WCK
BCK
BVD
BHD
GVD
GHD
RVD
RHD
2-B1
HDIN
VDIN
2-C1
GJ04 JP (DEL)
GJ03
CH247 104FZ
RH425 330
(HD)
HD
RH207 330
GJ02 JP
CH414 104FZ
VSS
VEE
INH
1Y
3Y
YCOM
2Y
0Y
A
3X
0X
XCOM
1X
2X
VDD
RH414 100
RH417 100
RH416 100
RH415 100
I2CS
SCLM
SDAU
SDAM
SCLU
CH243 104FZ(DEL)
QH176
MC14052BFEL(DEL)
GJ01 JP
CH063 104FZ
QH063
MC33078DR2
RH063 10K
RH064 10K
CH249 0.1uF
CH062 0.1uF
GJ07 (DEL)
LH061 TEM2103T
RH062 1K
CH052 104FZ
V-GND
VIHB
PIHB
NC
F1-A
F1-B
PFDO
L-GND
QH178
AT24C1610PC(DEL)
QH173
AT24C1610PC
QH175
AT24C1610PC(DEL)
QH174
AT24C1610PC(DEL)
A0
A1
A2
GND
VCC
WP
SCL
SDA
CH412 104FZ(DEL)
CH241 104FZ
CH242 104FZ(DEL)
CH244 104FZ
RH418 4.7K(DEL)
RH419 4.7K(DEL)
RH201 4.7K
RH202 4.7K
RH203 4.7K(DEL)
RH204 4.7K(DEL)
RH205 4.7K
RH206 4.7K

DIGITAL CONVER

65HDX82 Series

[SHEET-1/2]

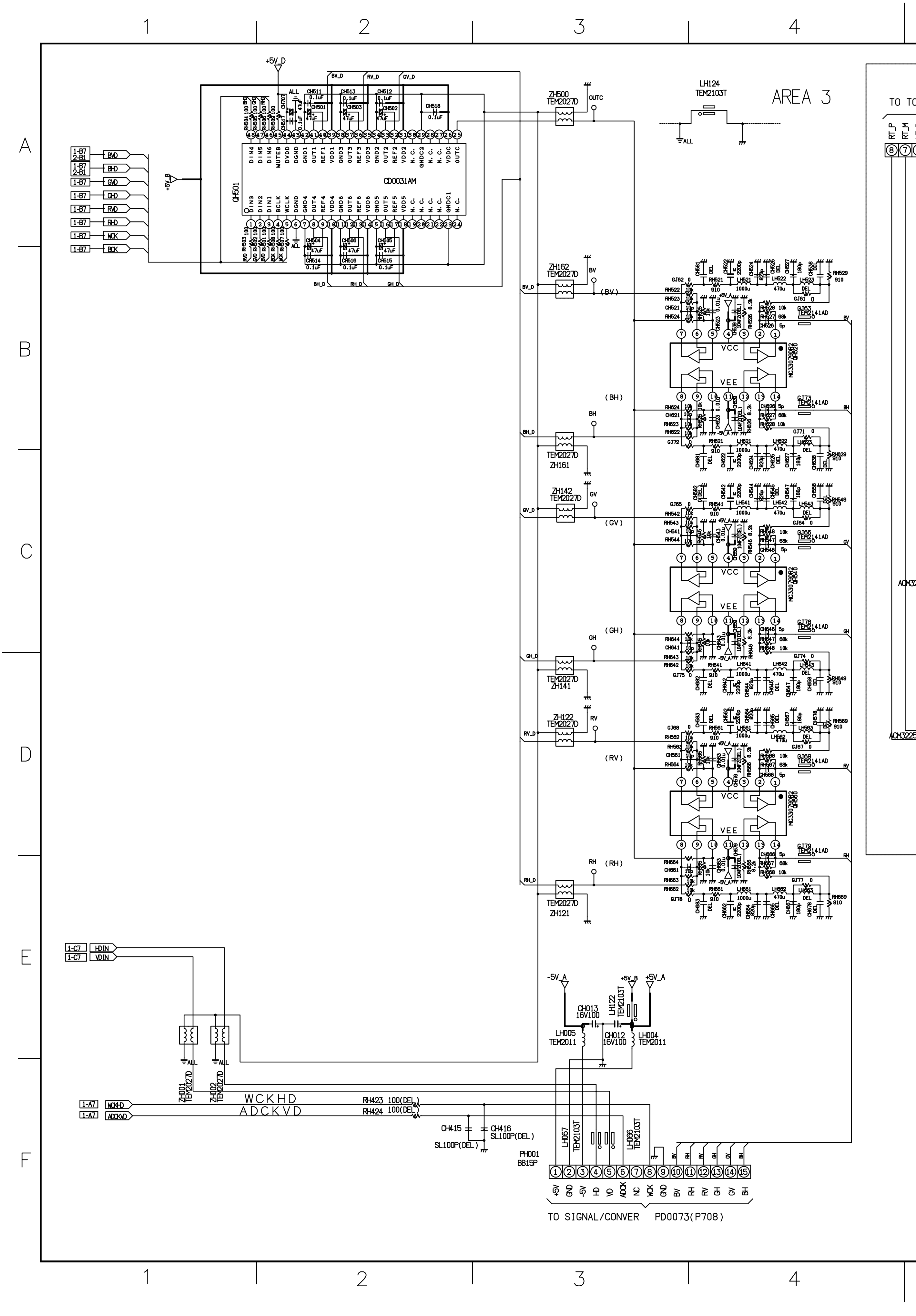

AREA 3
LH124
TEM2103T
CD0031AM
QH501
ZH500
TEM2027D
OUTC
ZH162
ZH161
ZH142
ZH141
ZH122
ZH121
(BV)
(BH)
(GV)
(GH)
(RV)
(RH)
MC33078DR
PD0079
TO TOUCH FOCUS SENSOR
RT_P
RT_M
LT_P
LT_M
BM_P
BM_M
TP_P
TP_M
PH004
PLUG 8P
+12V_A
-12_A
+5V_D
NJM2058M
QH305
QH306
QH307
ACM3225-271(DEL)
TC74HC123AF
QH308
QH309
BOTTOM
TOP
RIGHT
LEFT
(TP1)
BM1(BM1)
TP2(TP2)
RT2(RT2)
LT2(LT2)
HDIN
VDIN
WCKHD
ADCKVD
RH423 100(DEL)
RH424 100(DEL)
CH415 SL100P(DEL)
CH416 SL100P(DEL)
PH001
BB15P
+5V
GND
-5V
HD
VD
ADCK
NC
WCK
BV
RH
RV
GH
GV
BH
TO SIGNAL/CONVER PD0073(P708)

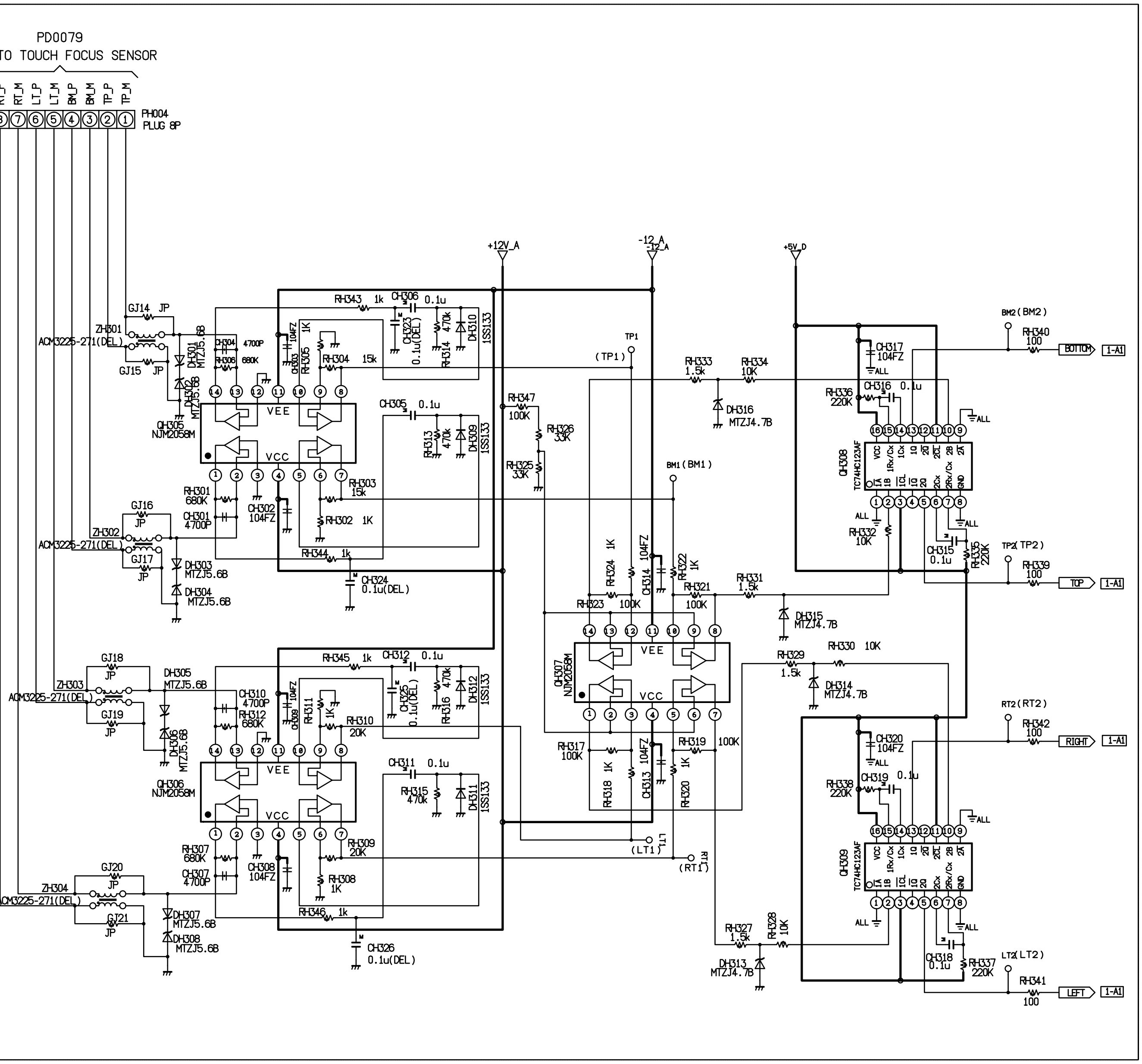
MODEL \ ITEM	▭ AREA 3
42H82/42HX82/50H82/ 50HX82/57H82 57HX82/65H82/ 65HDX82/65HD82	Use
43H72	Use
50H72	No use

DIGITAL CONVER

65HDX82 Series

[SHEET-2/2]


1
2
3
4
A
B
C
D
E
F
AREA 3
TO TO
RT_P
RT_M
+5V_D
BV_D
RV_D
GV_D
ALL
CH511 0.1uF
CH513 0.1uF
CH512 0.1uF
CH501 47uF
CH503 47uF
CH502 47uF
CH518 0.1uF
CH707
QH501
CD0031AM
DIN4
DIN5
DIN6
MUTEB
DVDD
DGND
GND1
OUT1
REF1
VDD1
GND3
OUT3
REF3
VDD3
GND2
OUT2
REF2
VDD2
N.C.
GNDC2
VDDC
OUTC
DIN3
DIN2
DIN1
BCLK
WCLK
GND4
OUT4
REF4
VDD4
GND6
OUT6
REF6
VDD6
GND5
OUT5
REF5
VDD5
GNDC1
RH504
RH503
CH504 47uF
CH506 47uF
CH505 47uF
CH514 0.1uF
CH516 0.1uF
CH515 0.1uF
BH_D
RH_D
GH_D
+5V_B
1-B7 2-B1 BVD
1-B7 2-B1 BHD
1-B7 GVD
1-B7 GHD
1-B7 RVD
1-B7 RHD
1-B7 WCK
1-B7 BCK
ZH500 TEM2027D
OUTC
LH124 TEM2103T
ZH162 TEM2027D
BV
(BV)
ZH161 TEM2027D
BH
(BH)
ZH142 TEM2027D
GV
(GV)
ZH141 TEM2027D
GH
(GH)
ZH122 TEM2027D
RV
(RV)
ZH121 TEM2027D
RH
(RH)
VCC
VEE
MC33078D
QH520
QH540
QH560
TEM2141AD
GJ63
GJ73
GJ66
GJ76
GJ69
GJ79
RH529 910
RH549 910
RH569 910
RH629
RH649
RH669 910
LH521 1000u
LH522 470u
2200p
180p
68k
10k
5p
8.2k
0.01u
10MZ(DEL)
ACM3225
1-C7 HDIN
1-C7 VDIN
ZH001 TEM2027D
ZH002 TEM2027D
-5V_A
+5V_B
+5V_A
CH013 16V100
CH012 16V100
LH122 TEM2103T
LH005 TEM2011
LH004 TEM2011
1-A7 WCKHD
1-A7 ADCKVD
WCKHD
ADCKVD
RH423 100(DEL)
RH424 100(DEL)
CH415 SL100P(DEL)
CH416 SL100P(DEL)
LH067 TEM2103T
LH066 TEM2103T
PH001 BB15P
+5V
GND
-5V
HD
VD
ADCK
NC
WCK
GND
BV
RH
RV
GH
GV
BH
TO SIGNAL/CONVER PD0073(P708)


PD0079
TO TOUCH FOCUS SENSOR
RT_M
LT_P
LT_M
BM_P
BM_M
TP_P
TP_M
PH004
PLUG 8P
+12V_A
-12_A
+5V_D
GJ14 JP
ZH301
ACM3225-271(DEL)
GJ15 JP
DH301 MTZJ5.6B
DH302 MTZJ5.6B
CH304 4700P
RH306 680K
RH343 1k
CH306 0.1u
CH323 0.1u(DEL)
RH314 470k
DH310 1SS133
CH303 104FZ
RH305 1K
RH304 15k
QH305 NJM2058M
VEE
VCC
CH305 0.1u
RH313 470k
DH309 1SS133
RH301 680K
CH301 4700P
CH302 104FZ
RH303 15k
RH302 1K
RH344 1k
CH324 0.1u(DEL)
GJ16 JP
ZH302
ACM3225-271(DEL)
GJ17 JP
DH303 MTZJ5.6B
DH304 MTZJ5.6B
GJ18 JP
ZH303
ACM3225-271(DEL)
GJ19 JP
DH305 MTZJ5.6B
DH306 MTZJ5.6B
CH310 4700P
RH312 680K
CH309 104FZ
RH311 1K
RH310 20K
RH345 1k
CH312 0.1u
CH325 0.1u(DEL)
RH316 470k
DH312 1SS133
QH306 NJM2058M
CH311 0.1u
RH315 470k
DH311 1SS133
RH307 680K
CH307 4700P
CH308 104FZ
RH309 20K
RH308 1K
RH346 1k
CH326 0.1u(DEL)
ZH304
ACM3225-271(DEL)
GJ20 JP
GJ21 JP
DH307 MTZJ5.6B
DH308 MTZJ5.6B
TP1 (TP1)
RH347 100K
RH326 33K
RH325 33K
BM1 (BM1)
LT1 (LT1)
RT1 (RT1)
RH333 1.5k
RH334 10K
DH316 MTZJ4.7B
RH324 1K
CH314 104FZ
RH322 1K
RH323 100K
RH321 100K
RH331 1.5k
DH315 MTZJ4.7B
QH307 NJM2058M
RH329 1.5k
RH330 10K
DH314 MTZJ4.7B
RH317 100K
RH318 1K
CH313 104FZ
RH320 1K
RH319 100K
RH327 1.5k
RH328 10K
DH313 MTZJ4.7B
BM2 (BM2)
RH340 100
BOTTOM
1-A1
CH317 104FZ
ALL
RH336 220K
CH316 0.1u
QH308 TC74HC123AF
VCC 1Rx/Cx 1Cx 1Q 2Q 2CL 2B 2A
1A 1B 1CL 1Q 2Q 2Cx 2Rx/Cx GND
RH332 10K
CH315 0.1u
RH335 220K
TP2 (TP2)
RH339 100
TOP
RT2 (RT2)
RH342 100
RIGHT
CH320 104FZ
RH338 220K
CH319 0.1u
QH309 TC74HC123AF
CH318 0.1u
RH337 220K
LT2 (LT2)
RH341 100
LEFT

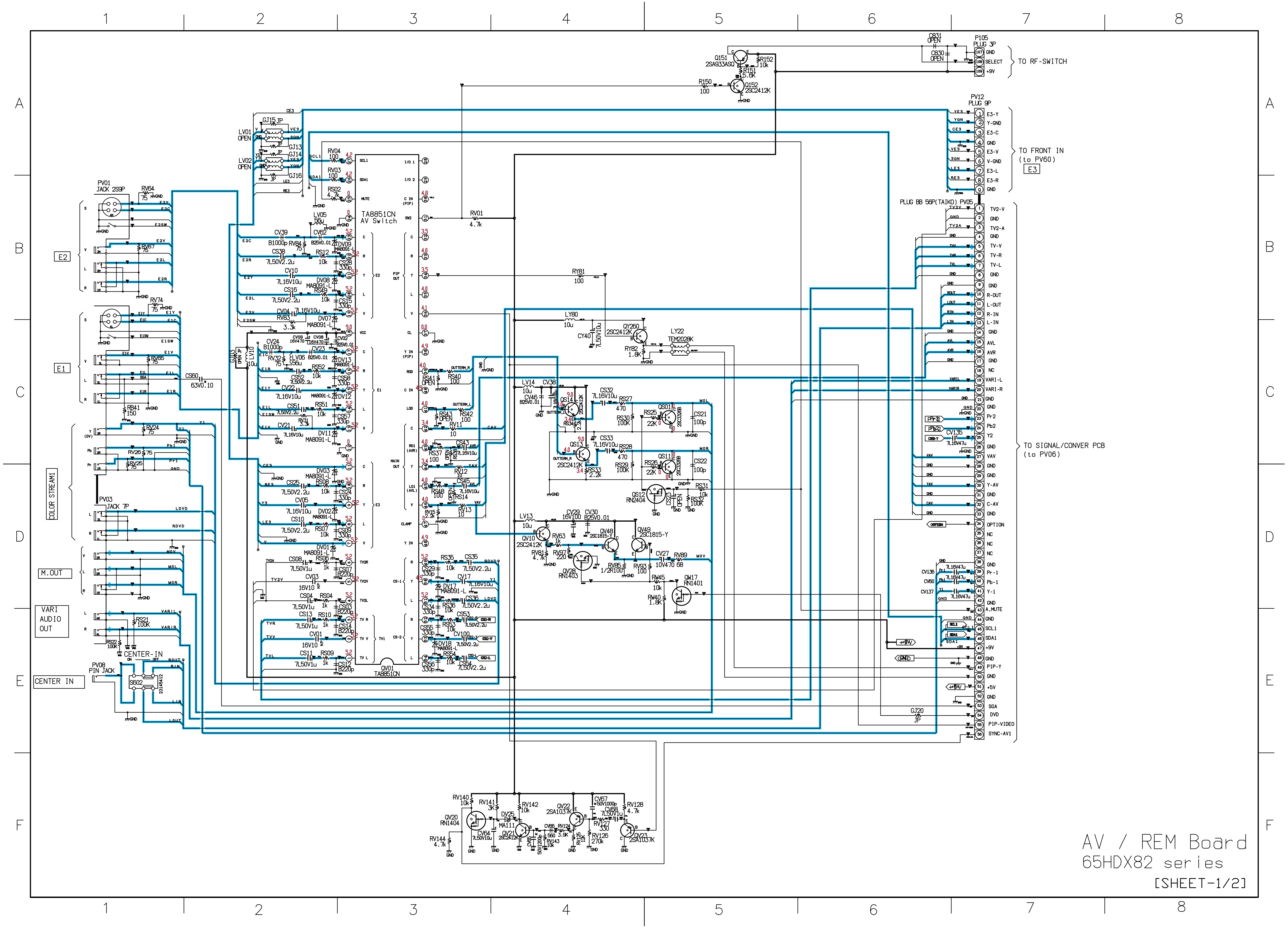
ITEM MODEL	☐ AREA 3
42H82/42HX82/50H82/ 50HX82/57H82 57HX82/65H82/ 65HDX82/65HD82	Use
43H72	Use
50H72	No use

A B C D E F

DIGITAL CONVER

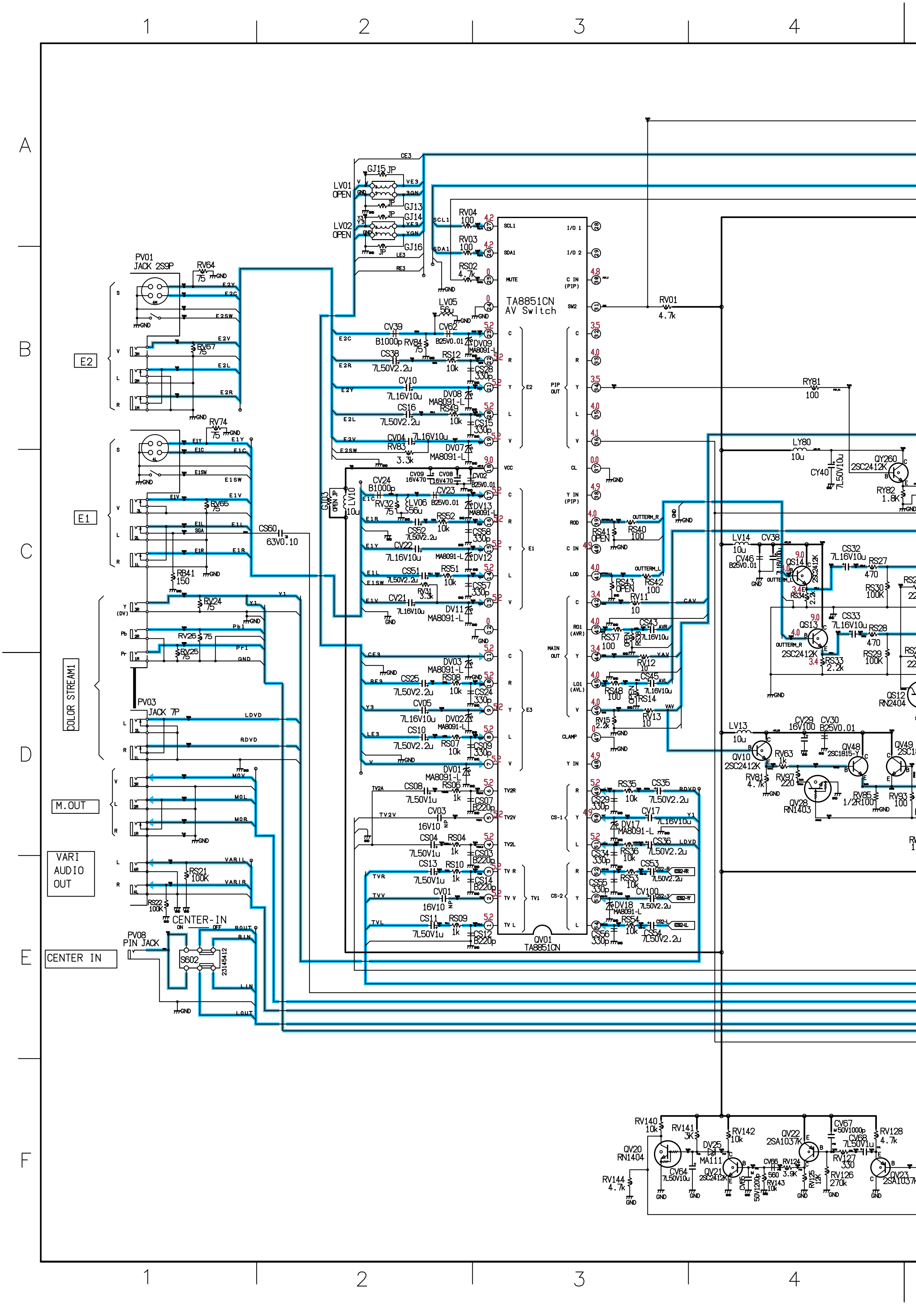
65HDX82 Series

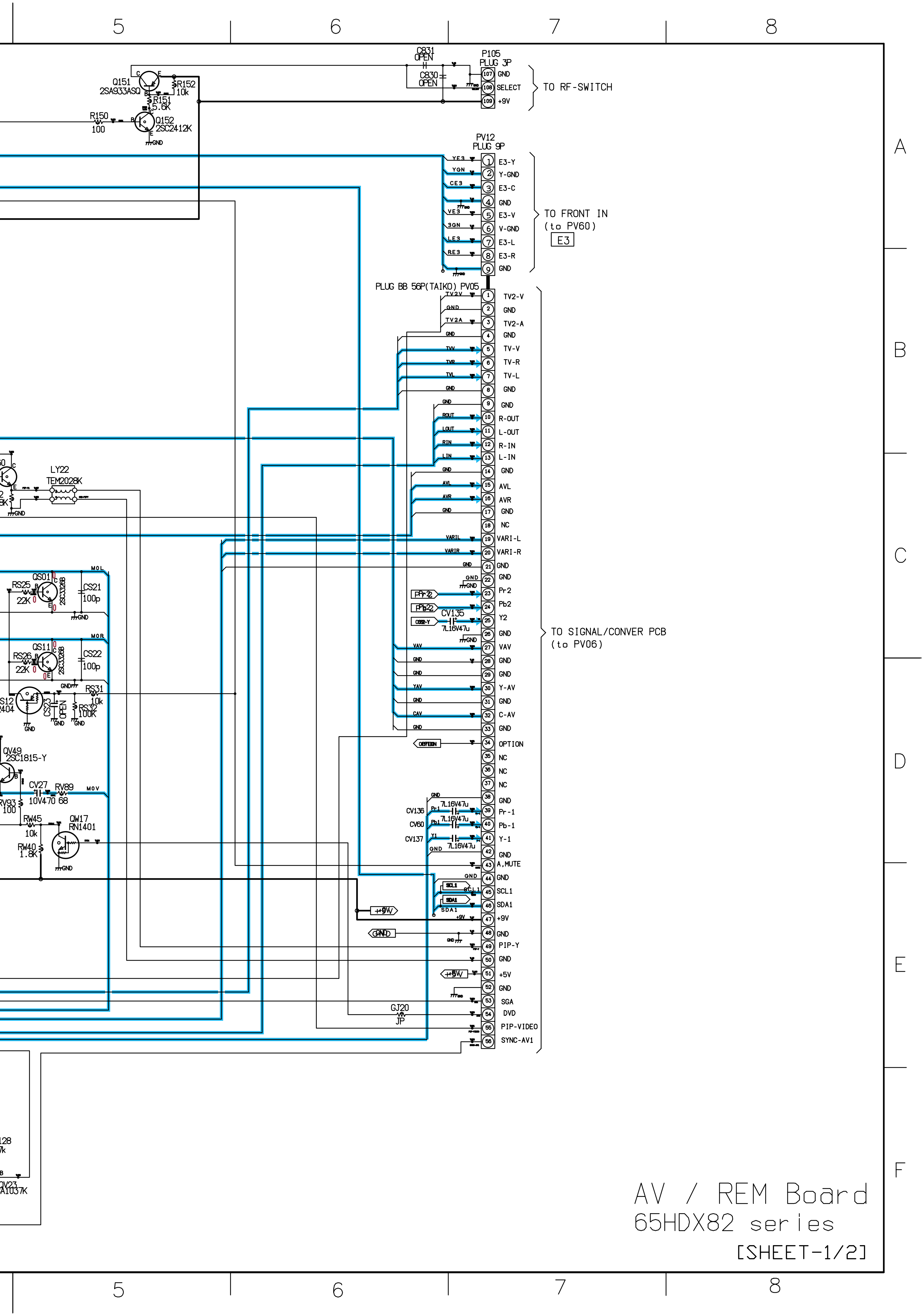
[SHEET-2/2]



1
2
3
4
5
6
7
8
A
B
C
D
E
F
P105
PLUG 3P
GND
SELECT
+9V
TO RF-SWITCH
C831
OPEN
C830
OPEN
Q151
2SA933ASQ
R152
10k
R151
5.6K
R150
100
Q152
2SC2412K
PV12
PLUG 9P
E3-Y
Y-GND
E3-C
GND
E3-V
V-GND
E3-L
E3-R
GND
TO FRONT IN
(to PV60)
E3
PLUG BB 56P(TAIKO) PV05
TV2-V
GND
TV2-A
GND
TV-V
TV-R
TV-L
GND
GND
R-OUT
L-OUT
R-IN
L-IN
GND
AVL
AVR
GND
NC
VARI-L
VARI-R
GND
GND
Pr2
Pb2
Y2
GND
VAV
GND
GND
Y-AV
GND
C-AV
GND
OPTION
NC
NC
NC
GND
Pr-1
Pb-1
Y-1
GND
A.MUTE
GND
SCL1
SDA1
+9V
GND
PIP-Y
GND
+5V
GND
SGA
DVD
PIP-VIDEO
SYNC-AV1
TO SIGNAL/CONVER PCB
(to PV06)
PV01
JACK 2S9P
E2
E1
COLOR STREAM1
PV03
JACK 7P
M.OUT
VARI
AUDIO
OUT
CENTER IN
PV08
PIN JACK
CENTER-IN
S602
LV01
OPEN
LV02
OPEN
GJ15 JP
GJ13
GJ14
GJ16
TA8851CN
AV Switch
QV01
TA8851CN
RV01
4.7k
RY81
100
LY80
10u
QY260
2SC2412K
LY22
TEM2028K
RY82
1.8K
CS60
63V0.10
QS14
2SC2412K
QS13
2SC2412K
QS01
QS11
QS12
RN2404
QV10
2SC2412K
QV48
2SC1815-Y
QV49
2SC1815-Y
QV26
RN1403
QW17
RN1401
QV20
RN1404
QV21
2SC2412K
QV22
2SA1037K
QV23
2SA1037K
DV25
MA111
+9V
GND
+5V
GJ20
JP

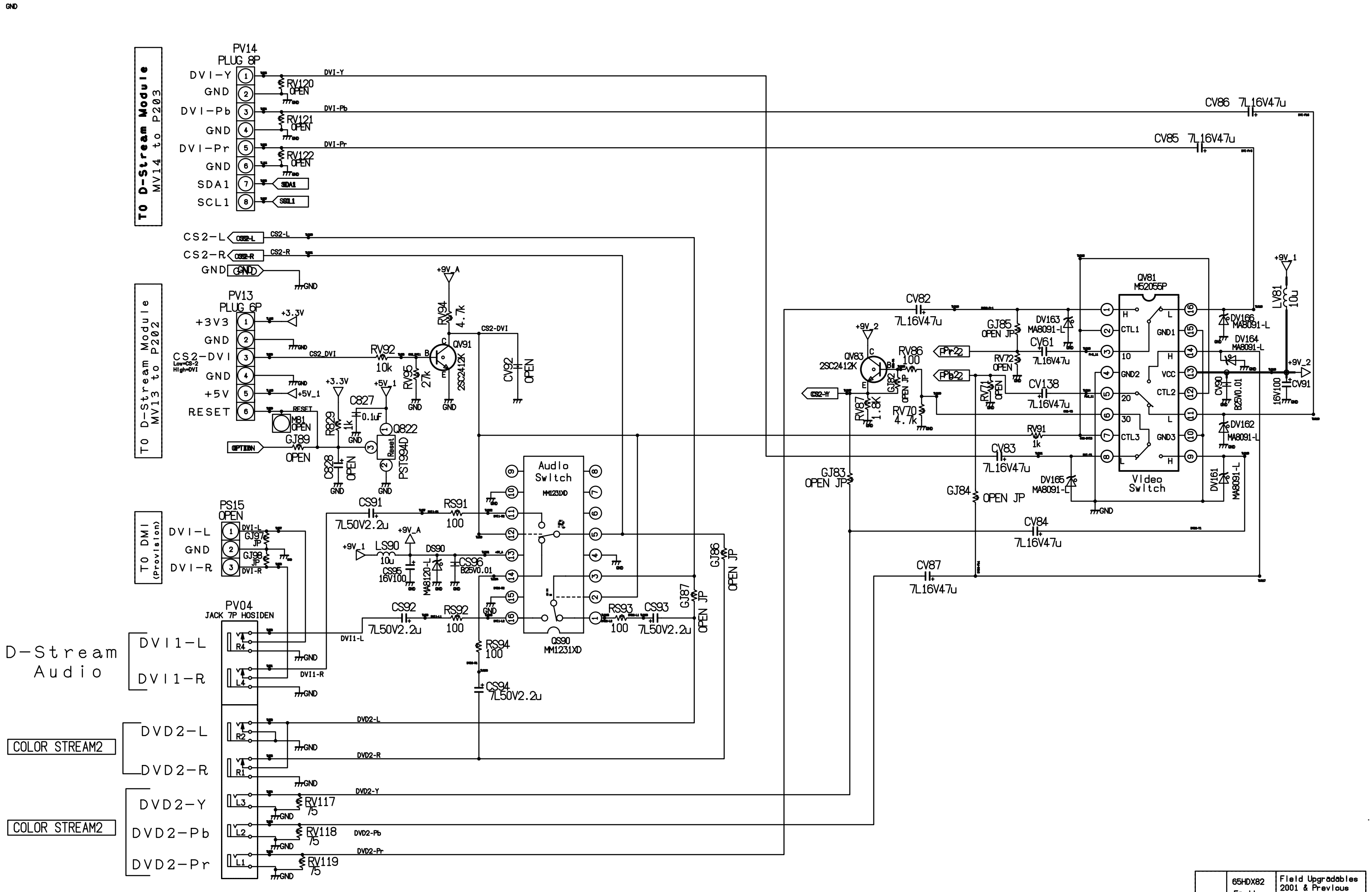
AV / REM Board
65HDX82 series
[SHEET-1/2]


1
2
3
4
A
B
C
D
E
F
TA8851CN
AV Switch
QV01
TA8851CN
PV01
JACK 2S9P
E2
E1
COLOR STREAM1
PV03
JACK 7P
M.OUT
VARI
AUDIO
OUT
CENTER IN
PV08
PIN JACK
CENTER-IN
S602
23145412
LV01
OPEN
LV02
OPEN
GJ15 JP
GJ13
GJ14
GJ16
GJ03
OPEN JP
LV10
10u
SCL1
SDA1
MUTE
I/O 1
I/O 2
C IN (PIP)
SW2
PIP OUT
CL
Y IN (PIP)
ROD
C IN
LOD
MAIN OUT
RO1 (AVR)
LO1 (AVL)
CLAMP
Y IN
CS-1
CS-2
VCC
TV2R
TV2V
TV2L
TV R
TV V
TV L
TV1
RV04 100
RV03 100
RS02 4.7k
RV01 4.7k
RY81 100
LY80 10u
CY40
7L50V10u
QY260
2SC2412K
RY82 1.8K
LV05 56u
CV39 B1000p
CV62 B25V0.01
RV84 75
DV09 MA8091-L
CS38 7L50V2.2u
RS12 10k
CS28 330p
CV10 7L16V10u
DV08 MA8091-L
CS16 7L50V2.2u
RS49 10k
CS15 330p
CV04 7L16V10u
RV83 3.3k
DV07 MA8091-L
CV24 B1000p
CV09 16V470
CV08 L16V470
CV02 B25V0.01
CV23 B25V0.01
RV32 75
LV06 56u
DV13 MA8091-L
CS52 7L50V2.2u
RS52 10k
CS58 330p
CV22 7L16V10u
DV12 MA8091-L
CS51 7L50V2.2u
RS51 10k
CS57 330p
RV31 3.3k
CV21 7L16V10u
DV11 MA8091-L
CS60 63V0.10
DV03 MA8091-L
CS25 7L50V2.2u
RS08 10k
CS24 330p
CV05 7L16V10u
DV02 MA8091-L
CS10 7L50V2.2u
RS07 10k
CS09 330p
DV01 MA8091-L
CS08 7L50V1u
RS06 1k
CS07 B220p
CV03 16V10
CS04 7L50V1u
RS04 1k
CS03 B220p
CS13 7L50V1u
RS10 1k
CS14 B220p
CV01 16V10
CS11 7L50V1u
RS09 1k
CS12 B220p
RS41 OPEN
RS40 100
RS43 OPEN
RS42 100
RV11 10
RS37 100
CS43 7L16V10u
RV12 10
RS48 100
CS45 7L16V10u
RS14
RV15 2.2k
RV13 10
RS35 10k
CS35 7L50V2.2u
CS29 330p
CV17 7L16V10u
DV17 MA8091-L
CS36 7L50V2.2u
CS34 330p
RS36 10k
CS53 7L50V2.2u
RS53 10k
CS55 330p
CV100 7L50V2.2u
DV18 MA8091-L
RS54 10k
CS54 7L50V2.2u
CS56 330p
RV64 75
RV67 75
RV74 75
RV65 75
RB41 150
RV24 75
RV26 75
RV25 75
RS21 100K
RS22 100K
LV14 10u
CV38
CV46 B25V0.01
QS14 2SC2412K
CS32 7L16V10u
RS27 470
RS34
RS30 100K
CS33 7L16V10u
RS28 470
QS13 2SC2412K
RS33 2.2k
RS29 100K
QS12 RN2404
LV13 10u
CV29 16V100
CV30 B25V0.01
QV10 2SC2412K
RV63 1k
QV48 2SC1815-Y
QV49
RV81 4.7k
RV97 220
QV28 RN1403
RV85 1/2R100
RV93 100
RV140 10k
RV141 3K
RV142 10k
DV25 MA111
QV20 RN1404
CV64 7L50V10u
QV21 2SC2412K
CV65 50V1200p
CV66 560
RV124 3.9K
RV143 10k
RV125 12K
QV22 2SA1037K
CV67 50V1000p
CV68 7L50V1u
RV128 4.7k
RV127 330
RV126 270k
QV23 2SA1037K
RV144 4.7k
E2Y
E2C
E2SW
E2V
E2L
E2R
E1Y
E1C
E1SW
E1V
E1L
E1R
SGA
Y1
Pb1
Pr1
LDVD
RDVD
MOV
MOL
MOR
VARIL
VARIR
ROUT
RIN
LIN
LOUT
CE3
VE3
3GN
YE3
YGN
LE3
RE3
CAV
AVR
YAV
AVL
VAV
OUTTERM_R
OUTTERM_L
CS2-R
CS2-Y
CS2-L
GND

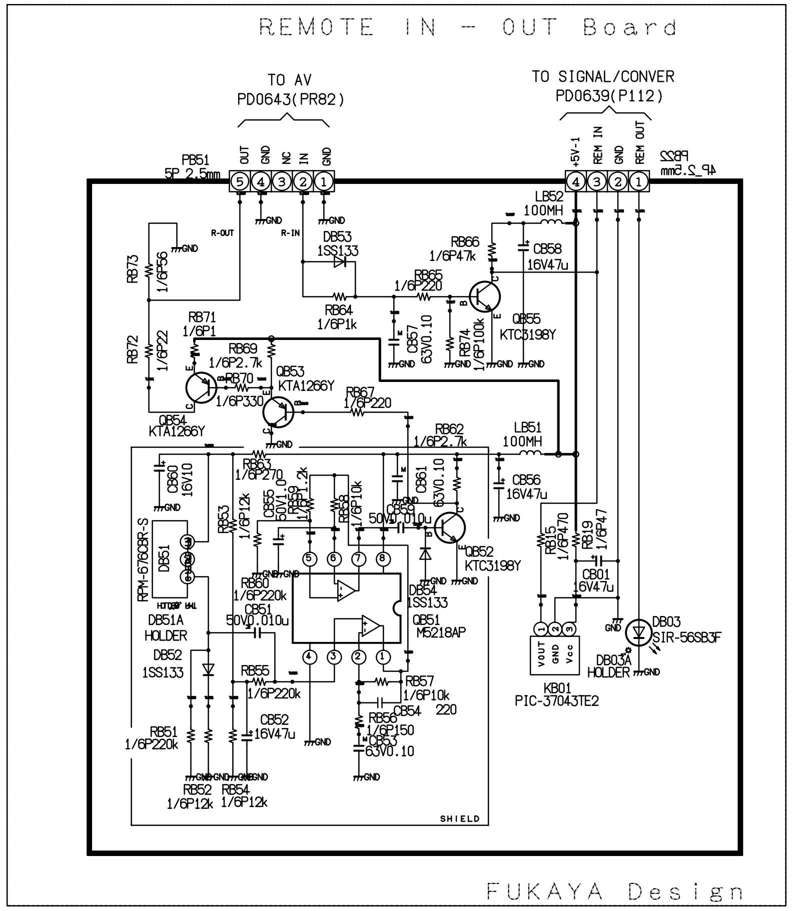


5
6
7
8
A
B
C
D
E
F
C831 OPEN
C830 OPEN
P105 PLUG 3P
107 GND
108 SELECT
109 +9V
TO RF-SWITCH
Q151 2SA933ASQ
R152 10k
R151 5.6K
R150 100
Q152 2SC2412K
GND
PV12 PLUG 9P
YE3
YGN
CE3
VE3
3GN
LE3
RE3
1 E3-Y
2 Y-GND
3 E3-C
4 GND
5 E3-V
6 V-GND
7 E3-L
8 E3-R
9 GND
TO FRONT IN (to PV60)
E3
PLUG BB 56P(TAIKO) PV05
1 TV2-V
2 GND
3 TV2-A
4 GND
5 TV-V
6 TV-R
7 TV-L
8 GND
9 GND
10 R-OUT
11 L-OUT
12 R-IN
13 L-IN
14 GND
15 AVL
16 AVR
17 GND
18 NC
19 VARI-L
20 VARI-R
21 GND
22 GND
23 Pr2
24 Pb2
25 Y2
26 GND
27 VAV
28 GND
29 GND
30 Y-AV
31 GND
32 C-AV
33 GND
34 OPTION
35 NC
36 NC
37 NC
38 GND
39 Pr-1
40 Pb-1
41 Y-1
42 GND
43 A,MUTE
44 GND
45 SCL1
46 SDA1
47 +9V
48 GND
49 PIP-Y
50 GND
51 +5V
52 GND
53 SGA
54 DVD
55 PIP-VIDEO
56 SYNC-AV1
TO SIGNAL/CONVER PCB (to PV06)
CV135 7L16V47u
CV136 7L16V47u
CV60 7L16V47u
CV137 7L16V47u
Pr2
Pb2
OPTION
+9V
GND
+5V
SCL1
SDA1
GJ20 JP
LY22 TEM2028K
QS01 2SC3268
RS25 22K
CS21 100p
MOL
QS11 2SC3268
RS26 22K
CS22 100p
MOR
RS31 10k
RS32 100K
CS23 OPEN
QV49 2SC1815-Y
CV27 10V470
RV89 68
MOV
RV93 100
RW45 10k
QW17 RN1401
RW40 1.8K

AV / REM Board
65HDX82 series
[SHEET-1/2]

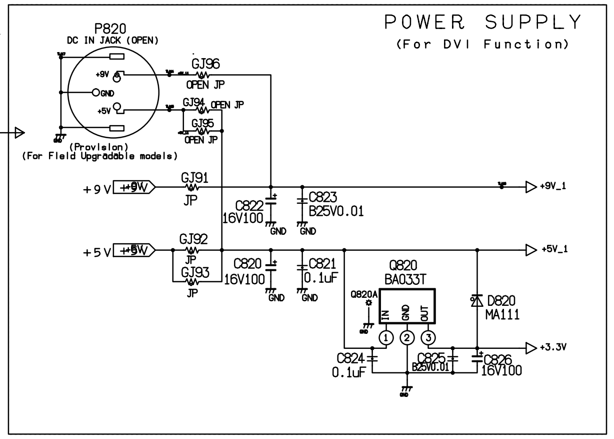


TO D-Stream Module MV14 to P203
PV14 PLUG 8P
DVI-Y
GND
DVI-Pb
GND
DVI-Pr
GND
SDA1
SCL1
RV120 OPEN
RV121 OPEN
RV122 OPEN
CV86 7L16V47u
CV85 7L16V47u
CS2-L
CS2-R
GND
TO D-Stream Module MV13 to P202
PV13 PLUG 6P
+3V3
CS2-DVI
+5V
RESET
RV92 10k
RV94 4.7k
QV91 2SC2412K
CV92 OPEN
C827 0.1uF
Q822 PST994D
GJ89 OPEN
OPTION
TO DMI (Provision)
PS15 OPEN
DVI-L
DVI-R
PV04 JACK 7P HOSIDEN
D-Stream Audio
DVI1-L
DVI1-R
COLOR STREAM2
DVD2-L
DVD2-R
DVD2-Y
DVD2-Pb
DVD2-Pr
RV117 75
RV118 75
RV119 75
CS91 7L50V2.2u
RS91 100
LS90 10u
CS95 16V100
CS96 B25V0.01
Audio Switch
QS90 MM1231XD
CS92 7L50V2.2u
RS92 100
RS93 100
CS93 7L50V2.2u
RS94 100
CS94 7L50V2.2u
GJ86 OPEN JP
GJ87 OPEN JP
CV82 7L16V47u
QV83 2SC2412K
RV86 100
RV87 1.8k
RV70 4.7k
GJ85 OPEN JP
RV72 OPEN
CV61 7L16V47u
CV138 7L16V47u
DV163 MA8091-L
DV165 MA8091-L
RV91 1k
CV83 7L16V47u
GJ83 OPEN JP
GJ84 OPEN JP
CV84 7L16V47u
CV87 7L16V47u
QV81 M52055P
Video Switch
DV166 MA8091-L
DV164 MA8091-L
DV162 MA8091-L
DV161 MA8091-L
CV90 B25V0.01
CV91 16V100
LV81 10u
+9V_1
+9V_2



REMOTE IN - OUT Board
TO AV PD0643(PR82)
TO SIGNAL/CONVER PD0639(P112)
PB51 5P 2.5mm
P822 4P 2.5mm
OUT
GND
NC
IN
GND
+5V-1
REM IN
GND
REM OUT
R-OUT
R-IN
DB53 1SS133
LB52 100MH
RB66 1/6P47k
CB58 16V47u
RB65 1/6P220
QB55 KTC3198Y
RB64 1/6P1k
CB57 63V0.10
RB74 1/6P100k
RB73 1/6P56
RB71 1/6P1
RB72 1/6P22
RB69 1/6P2.7k
RB70 1/6P330
QB53 KTA1266Y
QB54 KTA1266Y
RB67 1/6P220
RB62 1/6P2.7k
LB51 100MH
CB60 16V10
RB63 1/6P270
CB56 16V47u
QB52 KTC3198Y
CB61 63V0.10
DB51 RPM-6763R-S
DB51A HOLDER
DB54 1SS133
QB51 M5218AP
DB52 1SS133
RB55 1/6P220k
RB51 1/6P220k
CB52 16V47u
RB57 1/6P10k
RB56 1/6P150 220
CB54
CB53 63V0.10
RB52 1/6P12k
RB54 1/6P12k
RB50 1/6P220k
CB51 50V0.010u
CB59 50V0.010u
RB76 1/6P470
RB19 1/6P47
CB01 16V47u
DB03 SIR-56SB3F
DB03A HOLDER
KB01 PIC-37043TE2
SHIELD
FUKAYA Design

	65HDX82 Family	Field Upgradables 2001 & Previous year models
GJ91 GJ92 GJ93	USE	NOT USED
GJ94 GJ95 GJ96 P820	NOT USED	USE

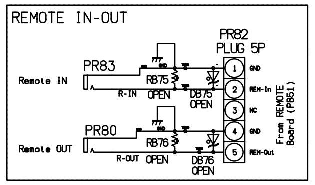


POWER SUPPLY
(For DVI Function)
P820
DC IN JACK (OPEN)
(Provision)
(For Field Upgradable models)
GJ96 OPEN JP
GJ94 OPEN JP
GJ95 OPEN JP
GJ91 JP
+9V
+5V
C822 16V100
C823 B25V0.01
+9V_1
GJ92 JP
GJ93 JP
C820 16V100
C821 0.1uF
+5V_1
Q820 BA033T
Q820A
D820 MA111
C824 0.1uF
C825 B25V0.01
C826 16V100
+3.3V

Notes:

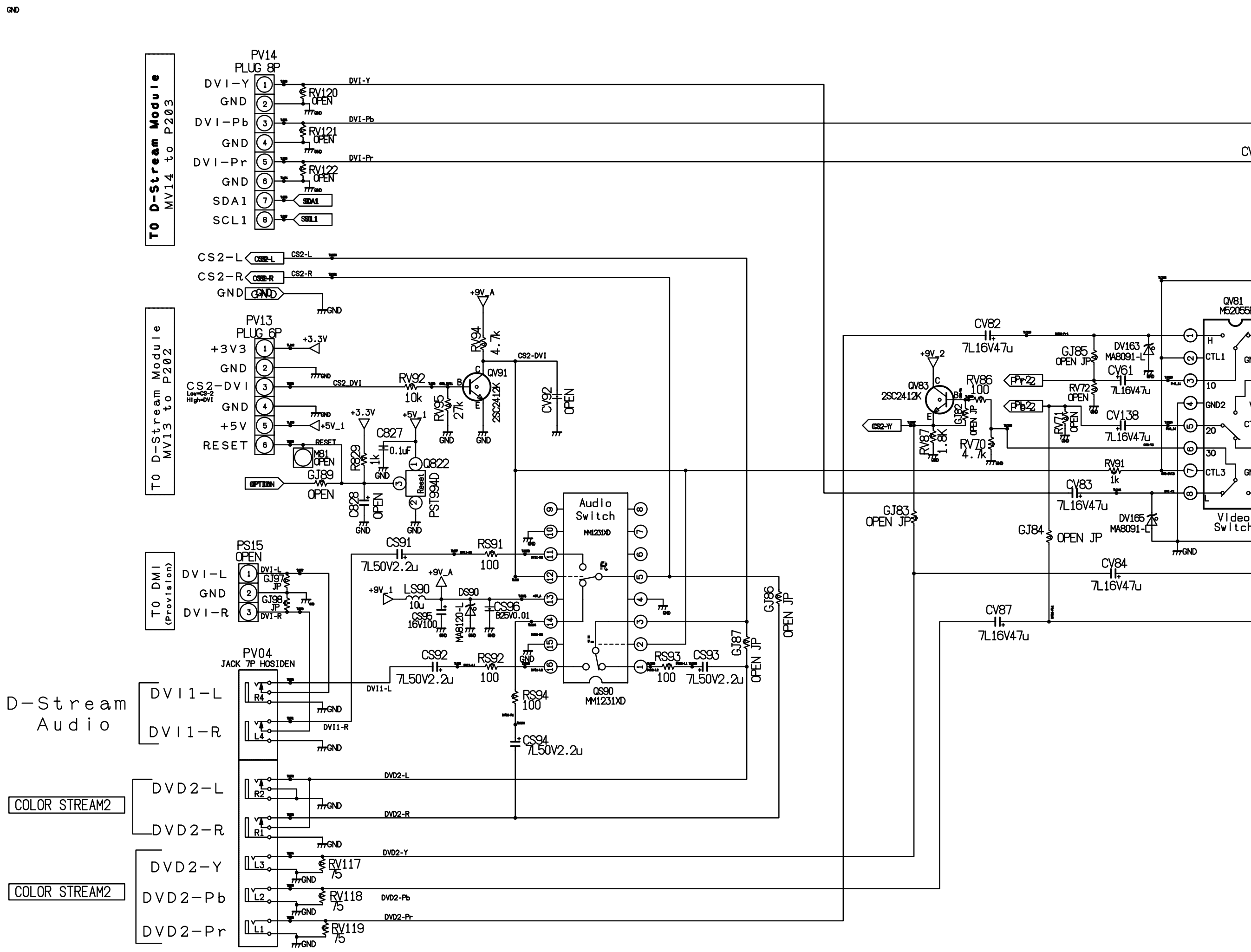
1) GJ83, GJ84, GJ85, GJ86, GJ87 used for models without D-Stream. For NON D-Stream models, ICs QV81, QS90, Q822 and their peripheral circuit are Not used.

2) "OPTION" (PV05 pin 34) is just a 'Provision'. Presently no use.



REMOTE IN-OUT
PR82 PLUG 5P
PR83
Remote IN
RB75
R-IN
OPEN
DB75 OPEN
PR80
Remote OUT
RB76
R-OUT
OPEN
DB76 OPEN
GND
REM-In
NC
GND
REM-Out
From REMOTE Board (PB51)

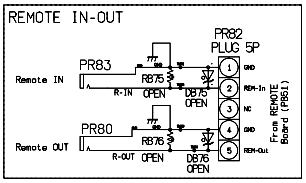
AV / REM Board
65HDX82 series
[SHEET-2/2]

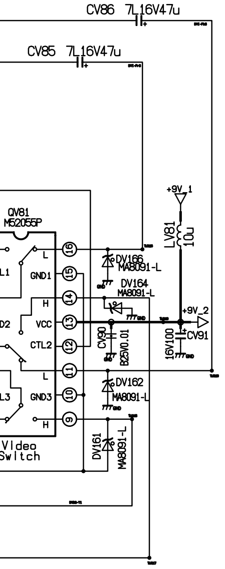

GND
TO D-Stream Module
MV14 to P203
PV14
PLUG 8P
DVI-Y
GND
DVI-Pb
GND
DVI-Pr
GND
SDA1
SCL1
RV120 OPEN
RV121 OPEN
RV122 OPEN
CS2-L
CS2-R
GND
TO D-Stream Module
MV13 to P202
PV13
PLUG 6P
+3V3
GND
CS2-DVI
Low=CS-2
High=DVI
GND
+5V
RESET
+3.3V
+5V_1
OPTION
GJ89 OPEN
MB1 OPEN
RV92 10k
RV95 27k
RV94 4.7k
+9V_A
QV91 2SC2412K
CS2-DVI
CV92 OPEN
R829 1k
C827 0.1uF
C828 OPEN
Q822 PST994D
Reset
Audio Switch
MM1231XD
QS90 MM1231XD
TO DMI (Provision)
PS15 OPEN
DVI-L
GND
DVI-R
GJ97 JP
GJ98 JP
CS91 7L50V2.2u
RS91 100
+9V_1
LS90 10u
CS95 16V100
DS90 MA8120-L
CS96 B25V0.01
CS92 7L50V2.2u
RS92 100
RS93 100
CS93 7L50V2.2u
RS94 100
CS94 7L50V2.2u
GJ86 OPEN JP
GJ87 OPEN JP
PV04
JACK 7P HOSIDEN
D-Stream Audio
DVI1-L
DVI1-R
COLOR STREAM2
DVD2-L
DVD2-R
COLOR STREAM2
DVD2-Y
DVD2-Pb
DVD2-Pr
RV117 75
RV118 75
RV119 75
CV82 7L16V47u
+9V_2
QV83 2SC2412K
RV86 100
GJ82 OPEN
RV87 1.8K
RV70 4.7k
CS2-Y
Pr22
Pb22
GJ85 OPEN JP
DV163 MA8091-L
CV61 7L16V47u
RV72 OPEN
RV71 OPEN
CV138 7L16V47u
RV91 1k
CV83 7L16V47u
DV165 MA8091-L
GJ83 OPEN JP
GJ84 OPEN JP
CV84 7L16V47u
CV87 7L16V47u
QV81 MG2055
H
CTL1
10
GND2
20
30
CTL3
Video Switch
CV

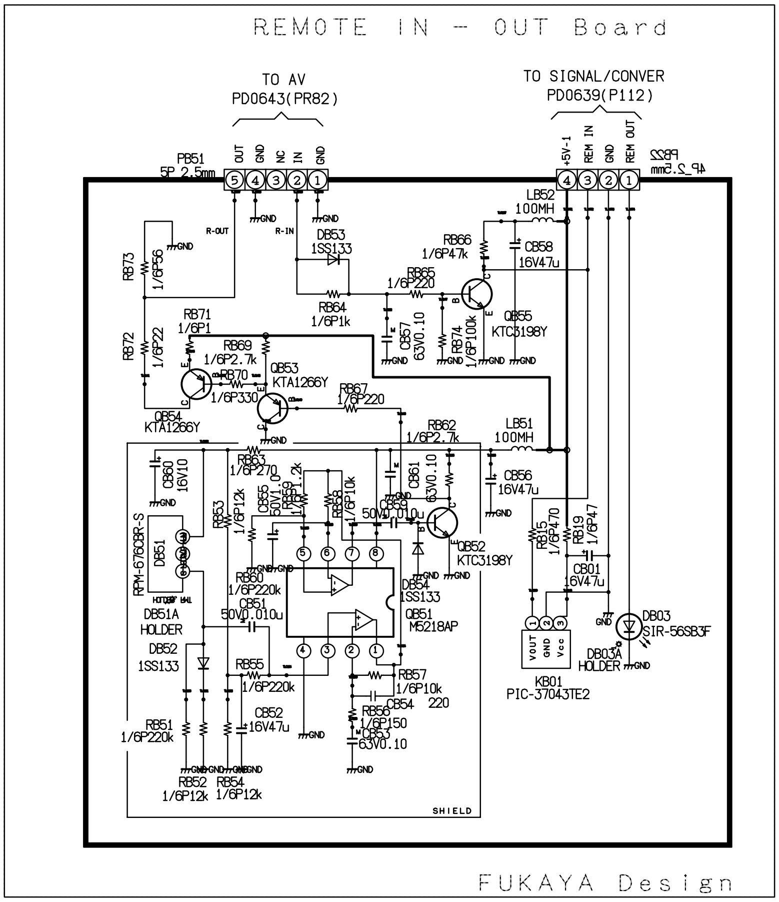
Notes:

1) GJ83, GJ84, GJ85, GJ86, GJ87 used for models without D-Stream.
For NON D-Stream models, ICs QV81, QS90, Q822 and their peripheral circuit are Not used.

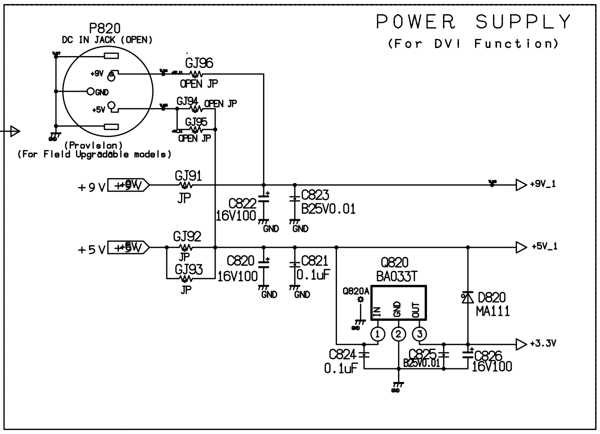
2) "OPTION" (PV05 pin 34) is just a 'Provision'. Presently no use.


REMOTE IN-OUT
PR82
PLUG 5P
PR83
Remote IN
R-IN
RB75 OPEN
DB75 OPEN
PR80
Remote OUT
R-OUT
RB76 OPEN
DB76 OPEN
GND
REM-In
NC
GND
REM-Out
From REMOTE Board (PB51)


CV86 7L16V47u
CV85 7L16V47u
QV81
M52055P
L1
GND1
D2
VCC
CTL2
L3
GND3
L
H
Video
Switch
DV166
MA8091-L
DV164
MA8091-L
DV162
MA8091-L
DV161
MA8091-L
CV90
B25V0.01
+9V_1
LV81
10u
+9V_2
CV91
16V100

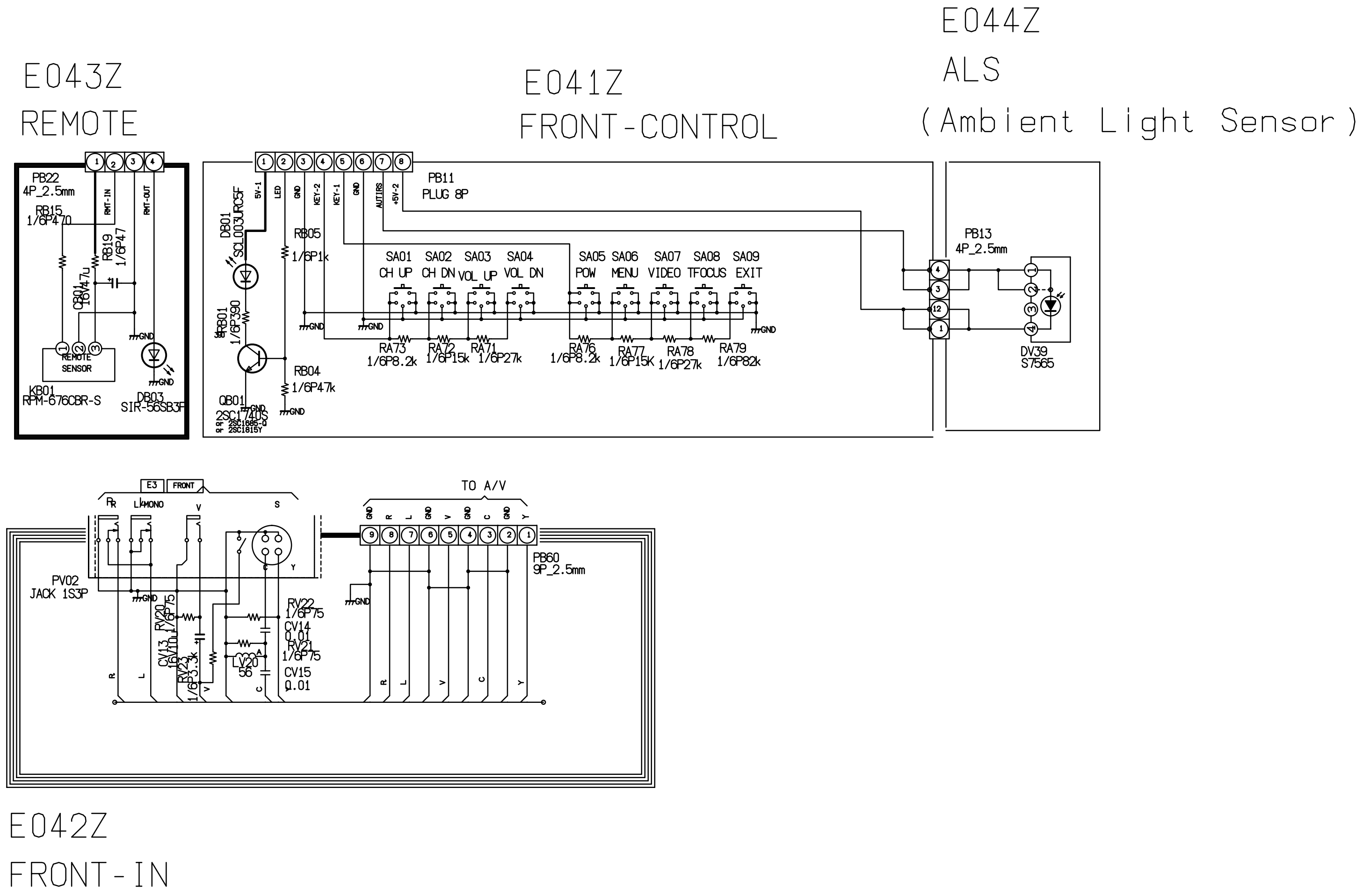

REMOTE IN - OUT Board
TO AV
PD0643(PR82)
TO SIGNAL/CONVER
PD0639(P112)
PB51
5P 2.5mm
OUT
GND
NC
IN
GND
+5V-1
REM IN
GND
REM OUT
PB22
4P 2.5mm
R-OUT
R-IN
DB53
1SS133
RB73
1/6P56
RB72
1/6P22
RB71
1/6P1
RB69
1/6P2.7k
RB70
1/6P330
QB53
KTA1266Y
QB54
KTA1266Y
RB67
1/6P220
RB64
1/6P1k
RB65
1/6P220
RB66
1/6P47k
LB52
100MH
CB58
16V47u
CB57
63V0.10
RB74
1/6P100k
QB55
KTC3198Y
RB62
1/6P2.7k
LB51
100MH
CB56
16V47u
RB63
1/6P270
CB60
16V10
RB53
1/6P12k
CB55
50V1.0
RB59
1/6P1.2k
RB58
1/6P10k
CB59
50V0.010u
CB61
63V0.10
QB52
KTC3198Y
RB15
1/6P470
RB19
1/6P47
CB01
16V47u
RPM-6760R-S
DB51
DB51A
HOLDER
RB60
1/6P220k
CB51
50V0.010u
DB54
1SS133
QB51
M5218AP
DB52
1SS133
RB55
1/6P220k
RB57
1/6P10k
CB54 220
RB56
1/6P150
CB53
63V0.10
CB52
16V47u
RB51
1/6P220k
RB52
1/6P12k
RB54
1/6P12k
VOUT
GND
Vcc
KB01
PIC-37043TE2
DB03
SIR-56SB3F
DB03A
HOLDER
GND
SHIELD
FUKAYA Design

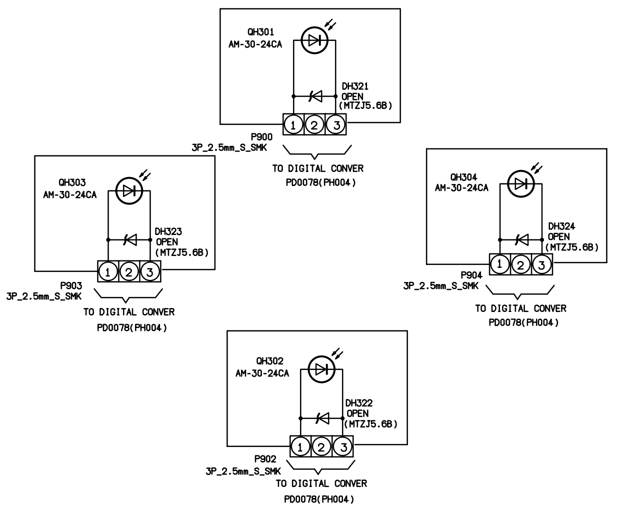
	65HDX82 Family	Field Upgradables 2001 & Previous year models
GJ91 GJ92 GJ93	USE	NOT USED
GJ94 GJ95 GJ96 P820	NOT USED	USE


POWER SUPPLY
(For DVI Function)
P820
DC IN JACK (OPEN)
+9V
GND
+5V
(Provision)
(For Field Upgradable models)
GJ96
OPEN JP
GJ94
OPEN JP
GJ95
OPEN JP
+9V
GJ91
JP
C822
16V100
C823
B25V0.01
+9V_1
+5V
GJ92
JP
GJ93
JP
C820
16V100
C821
0.1uF
+5V_1
Q820
BA033T
Q820A
IN
GND
OUT
D820
MA111
C824
0.1uF
C825
B25V0.01
C826
16V100
+3.3V

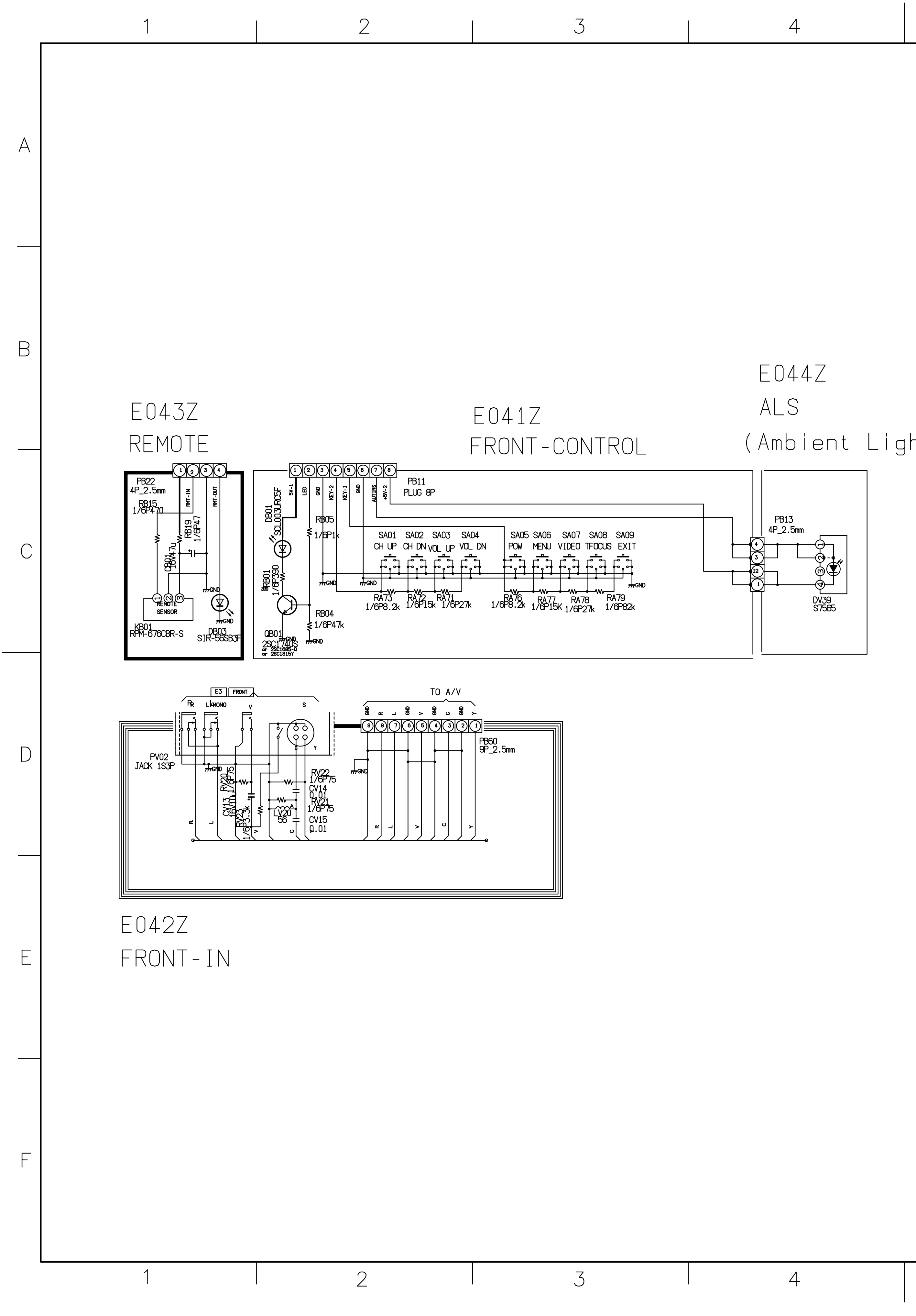
AV / REM Board
65HDX82 series

[SHEET-2/2]


E043Z
REMOTE
PB22
4P_2.5mm
RMT-IN
RMT-OUT
RB15
1/6P470
RB19
1/6P47
CB01
16V47u
GND
REMOTE SENSOR
KB01
RPM-676CBR-S
DB03
SIR-56SB3F
E041Z
FRONT-CONTROL
PB11
PLUG 8P
5V-1
LED
GND
KEY-2
KEY-1
GND
AUTIRS
+5V-2
DB01
SCL003URC5F
RB05
1/6P1k
RB01
1/6P390
RB04
1/6P47k
QB01
2SC1740S
or 2SC1685-Q
or 2SC1815Y
SA01
CH UP
SA02
CH DN
SA03
VOL UP
SA04
VOL DN
SA05
POW
SA06
MENU
SA07
VIDEO
SA08
TFOCUS
SA09
EXIT
RA73
1/6P8.2k
RA72
1/6P15k
RA71
1/6P27k
RA76
1/6P8.2k
RA77
1/6P15K
RA78
1/6P27k
RA79
1/6P82k
E044Z
ALS
(Ambient Light Sensor)
PB13
4P_2.5mm
DV39
S7565
E3
FRONT
R
L/MONO
V
S
C
Y
PV02
JACK 1S3P
RV20
1/6P75
CV13
16V10u
RV23
1/6P3.3k
RV22
1/6P75
CV14
0.01
RV21
1/6P75
LV20
56
CV15
0.01
TO A/V
GND
R
L
V
C
Y
PB60
9P_2.5mm
E042Z
FRONT-IN


QH301
AM-30-24CA
DH321
OPEN
(MTZJ5.6B)
P900
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH303
AM-30-24CA
DH323
OPEN
(MTZJ5.6B)
P903
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH304
AM-30-24CA
DH324
OPEN
(MTZJ5.6B)
P904
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH302
AM-30-24CA
DH322
OPEN
(MTZJ5.6B)
P902
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)

FRONT
T.FOCUS-SENSOR
65HDX82 Series

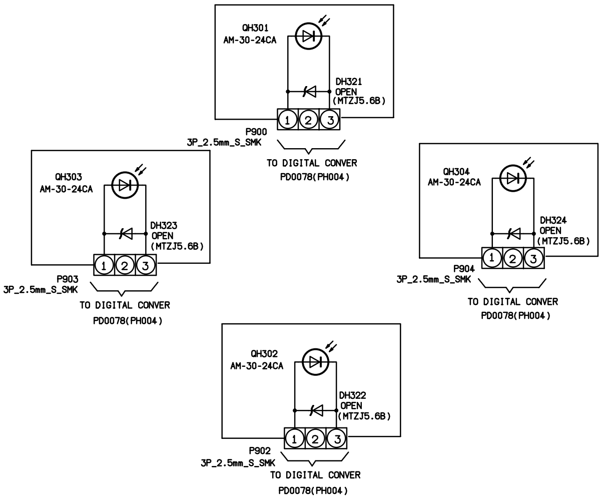

1
2
3
4
A
B
C
D
E
F
E043Z
REMOTE
E041Z
FRONT-CONTROL
E044Z
ALS
(Ambient Ligh
PB22
4P_2.5mm
RB15
1/6P470
RMT-IN
RMT-OUT
RB19
1/6P47
CB04
16V47u
GND
REMOTE SENSOR
KB01
RPM-676CBR-S
DB03
SIR-56SB3F
PB11
PLUG 8P
5V-1
LED
GND
KEY-2
KEY-1
GND
AUTIRS
+5V-2
DB01
SCL003URC5F
RB05
1/6P1k
RB01
1/6P390
QB01
2SC1740S
2SC1685-Q
2SC1815Y
RB04
1/6P47k
SA01 CH UP
SA02 CH DN
SA03 VOL UP
SA04 VOL DN
SA05 POW
SA06 MENU
SA07 VIDEO
SA08 TFOCUS
SA09 EXIT
RA73 1/6P8.2k
RA72 1/6P15k
RA71 1/6P27k
RA76 1/6P8.2k
RA77 1/6P15K
RA78 1/6P27k
RA79 1/6P82k
PB13
4P_2.5mm
DV39
S7565
E3
FRONT
R
L/MONO
V
S
Y
C
PV02
JACK 1S3P
RV20 1/6P75
CV13 16V10u
RV23 1/6P3.3k
LV20 56
RV22 1/6P75
CV14 0.01
RV21 1/6P75
CV15 0.01
TO A/V
GND
R
L
GND
V
GND
C
GND
Y
PB60
9P_2.5mm
E042Z
FRONT-IN

A

B

ght Sensor)

C


QH301
AM-30-24CA
DH321
OPEN
(MTZJ5.6B)
1
2
3
P900
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH303
AM-30-24CA
DH323
OPEN
(MTZJ5.6B)
1
2
3
P903
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH304
AM-30-24CA
DH324
OPEN
(MTZJ5.6B)
1
2
3
P904
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)
QH302
AM-30-24CA
DH322
OPEN
(MTZJ5.6B)
1
2
3
P902
3P_2.5mm_S_SMK
TO DIGITAL CONVER
PD0078(PH004)

D

E

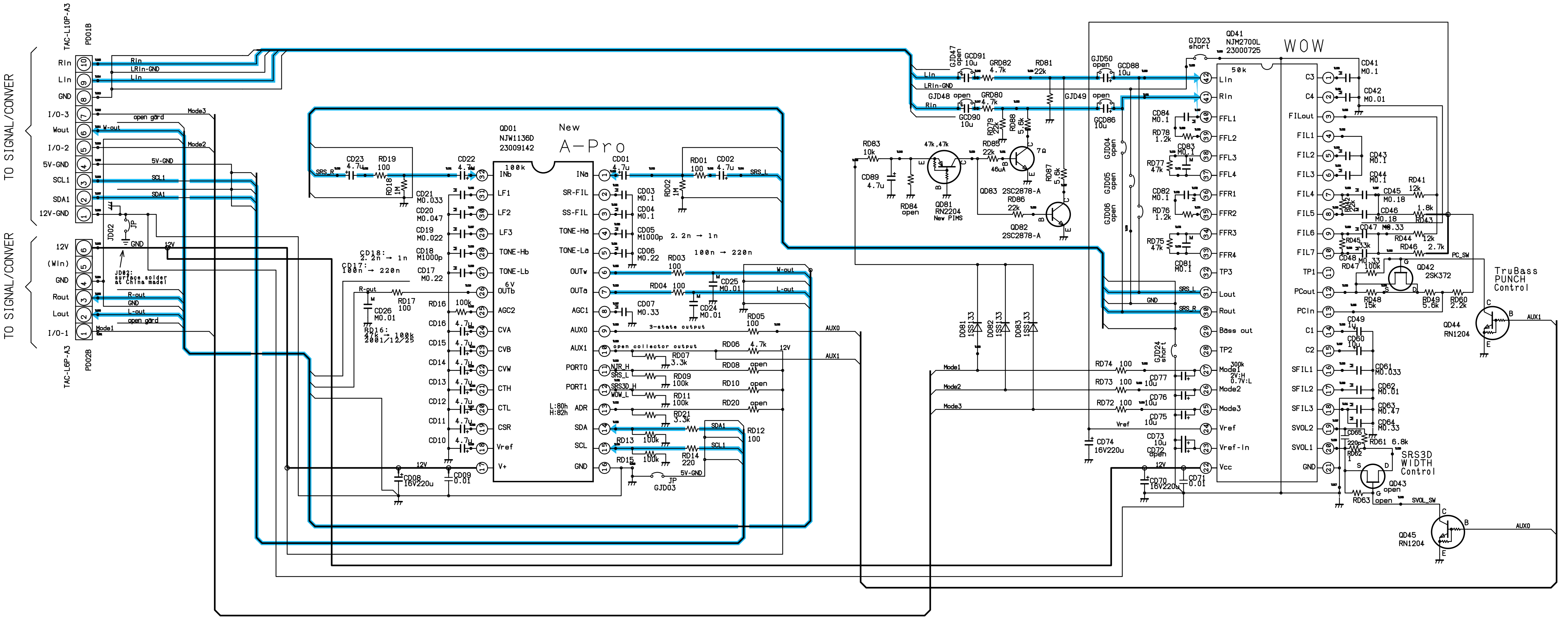
F

FRONT
T.FOCUS-SENSOR
65HDX82 Series

Base model: 36HFX72
PD0645A
23787466

WOW	H	H	H
FOCUS	H	L	L
3D-STEREO	L	L	H
TruBass	L	H	L
BYPASS	L	L	L
	Mode1	Mode2	Mode3

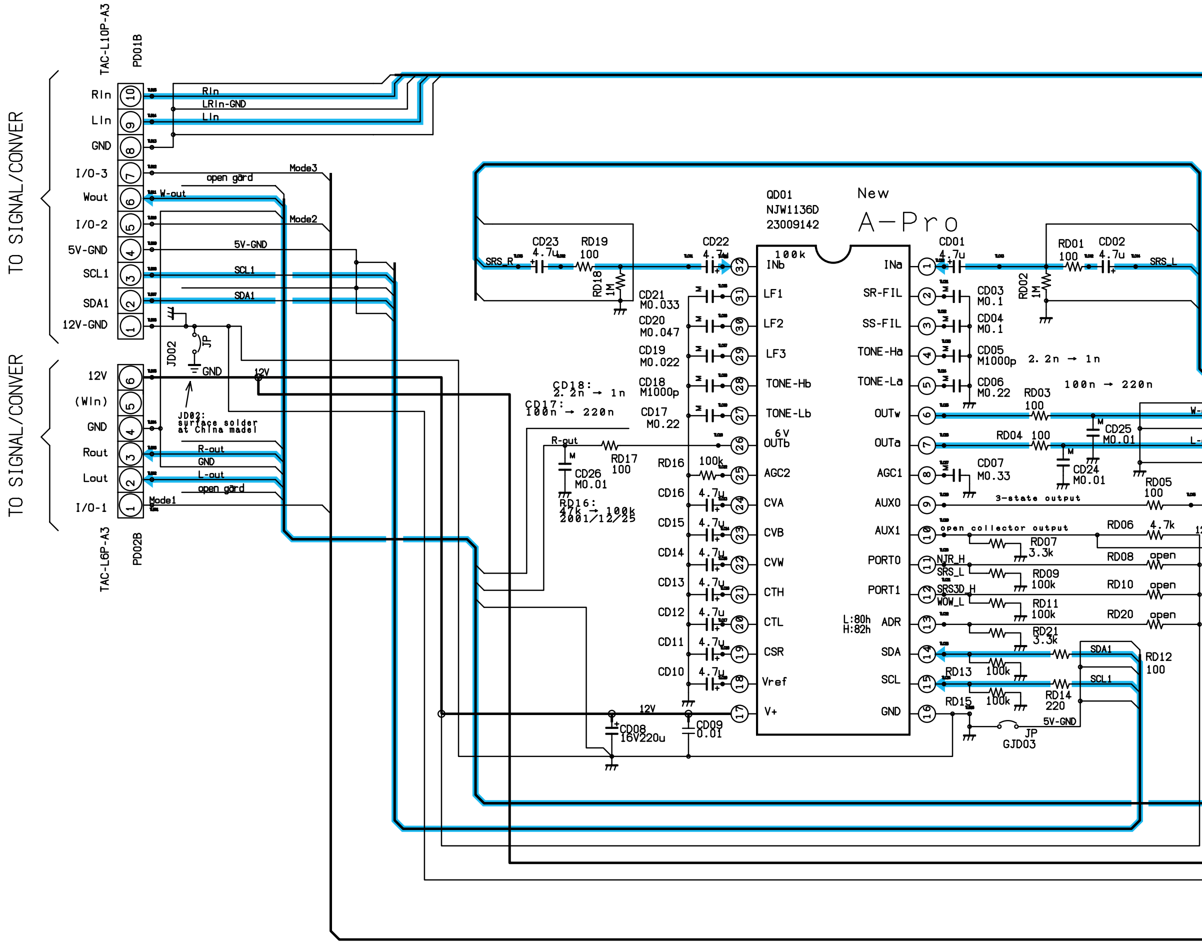
US_LCoS_57HL82	PD0645E	45047	57HL82
US_PJ_TNP_WOW	PD0645B	23787523	50HX82
US_DView_TNP_WOW	PD0645A	23787466	36HFX72
US_PJ_TNP_WOW_#1	FWD666	44806	50HX82_#1
US_DView_TVE	PDxxx6	2378xxx6	34HF81-
US_DView_TNP_WOW_#1	FWD666A	44814	36HFX72_#1
Asia_PJ_TSP_WOW	PDxxx4	2378xxx4	43VH9UE
Asia_PJ_DLTV_WOW	PD0645D	45131	43VH9UC
Asia_DView_TVE_WOW	PD0645C	44939	29VX9UH
Asia_DView_TVE_A-Pro	FWD666B	44930	29VH9UH
	unit	SN	model


TO SIGNAL/CONVER
TAC-L10P-A3
PD01B
RIn
LIn
GND
I/O-3
Wout
I/O-2
5V-GND
SCL1
SDA1
12V-GND
LRIn-GND
open gard
W-out
Mode3
Mode2
JD02
JP
TO SIGNAL/CONVER
12V
(WIn)
GND
Rout
Lout
I/O-1
TAC-L6P-A3
PD02B
JD02:
surface solder
at China model
R-out
L-out
Mode1
SRS_R
CD23
4.7u
RD19
100
RD18
1M
CD22
4.7u
QD01
NJW1136D
23009142
New
A-Pro
100k
INb
LF1
LF2
LF3
TONE-Hb
TONE-Lb
6V
OUTb
AGC2
CVA
CVB
CVW
CTH
CTL
CSR
Vref
V+
INa
SR-FIL
SS-FIL
TONE-Ha
TONE-La
OUTw
OUTa
AGC1
AUX0
AUX1
PORT0
PORT1
L:80h
H:82h
ADR
SDA
SCL
GND
CD21
M0.033
CD20
M0.047
CD19
M0.022
CD18
M1000p
CD17
M0.22
CD18:
2.2n → 1n
CD17:
100n → 220n
RD17
100
CD26
M0.01
RD16
100k
RD16:
47k → 100k
2001/12/25
CD16
CD15
CD14
CD13
CD12
CD11
CD10
4.7u
CD08
16V220u
CD09
0.01
CD01
4.7u
RD01
100
CD02
4.7u
SRS_L
RD02
1M
CD03
M0.1
CD04
M0.1
CD05
M1000p
2.2n → 1n
CD06
M0.22
100n → 220n
RD03
100
RD04
100
CD25
M0.01
CD24
M0.01
CD07
M0.33
RD05
100
3-state output
open collector output
RD06
4.7k
RD07
3.3k
NJR_H
SRS_L
RD08
open
RD09
100k
SRS3D_H
WOW_L
RD10
open
RD11
100k
RD20
open
RD21
3.3k
SDA1
SCL1
RD12
100
RD13
100k
RD14
220
RD15
100k
5V-GND
JP
GJD03
AUX0
AUX1
GJD47
open
GCD91
10u
GRD82
4.7k
RD81
22k
GJD48
open
GRD80
4.7k
GCD90
10u
RD79
22k
RD88
5.6k
GJD49
open
RD83
10k
CD89
4.7u
RD84
open
47k,47k
QD81
RN2204
New PIMS
RD85
22k
46uA
7Ω
QD83 2SC2878-A
RD86
22k
QD82
2SC2878-A
RD87
5.6k
DD81
1SS133
DD82
1SS133
DD83
1SS133
GJD50
open
GCD88
10u
GCD86
10u
GJD04
open
GJD05
open
GJD06
open
GJD23
short
QD41
NJM2700L
23000725
WOW
50k
LIn
RIn
FFL1
FFL2
FFL3
FFL4
FFR1
FFR2
FFR3
FFR4
TP3
Lout
Rout
Bass out
TP2
Mode1
Mode2
Mode3
Vref
Vref-In
Vcc
300k
2V:H
0.7V:L
CD84
M0.1
RD78
1.2k
CD83
M0.1
RD77
47k
CD82
M0.1
RD76
1.2k
RD75
47k
CD81
M0.1
GJD24
short
RD74 100
RD73 100
RD72 100
CD77
10u
CD76
10u
CD75
10u
CD74
16V220u
CD73
10u
CD72
open
12V
CD70
16V220u
CD71
0.01
C3
C4
FILout
FIL1
FIL2
FIL3
FIL4
FIL5
FIL6
FIL7
TP1
PCout
PCIn
C1
C2
SFIL1
SFIL2
SFIL3
SVOL2
SVOL1
GND
CD41
M0.1
CD42
M0.01
CD43
M0.1
CD44
M0.1
CD45
M0.18
RD41
12k
RD42
22k
CD46
M0.18
1.8k
RD43
CD47
M0.33
RD44
12k
RD45
33k
RD46
2.7k
CD48
M0.33
RD47
100k
PC_SW
QD42
2SK372
RD48
15k
RD49
5.6k
RD60
2.2k
TruBass
PUNCH
Control
QD44
RN1204
CD49
1u
CD60
10u
CD61
M0.033
CD62
M0.01
CD63
M0.47
CD64
M0.33
CD65
220p
RD61 6.8k
RD62
1
SRS3D
WIDTH
Control
QD43
open
RD63
open
SVOL_SW
QD45
RN1204

SRS-WOW
65HDX82 Series

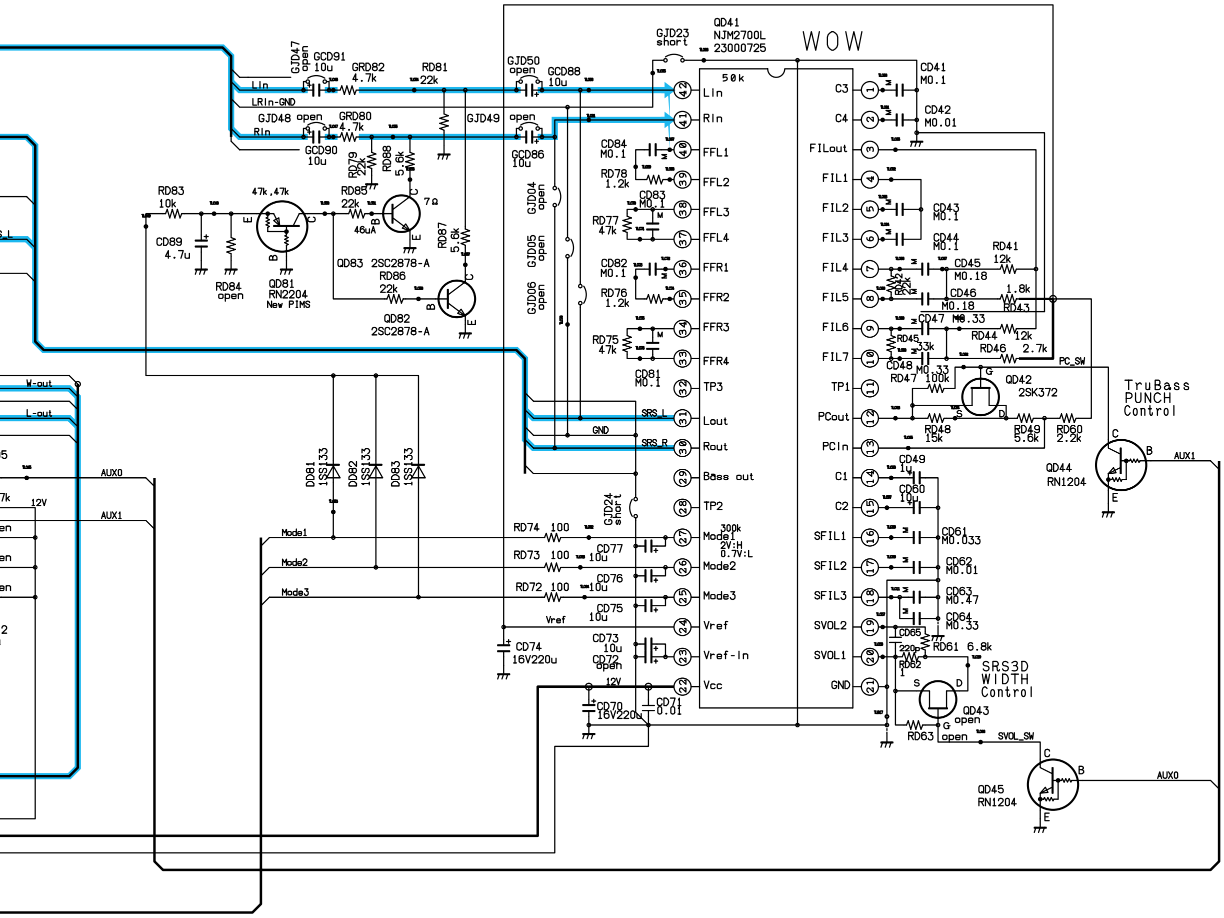
Base model: 36HFX72
PD0645A
23787466

WOW	H	H	H
FOCUS	H	L	L
3D-STEREO	L	L	H
TruBass	L	H	L
BYPASS	L	L	L
	Mode1	Mode2	Mode3

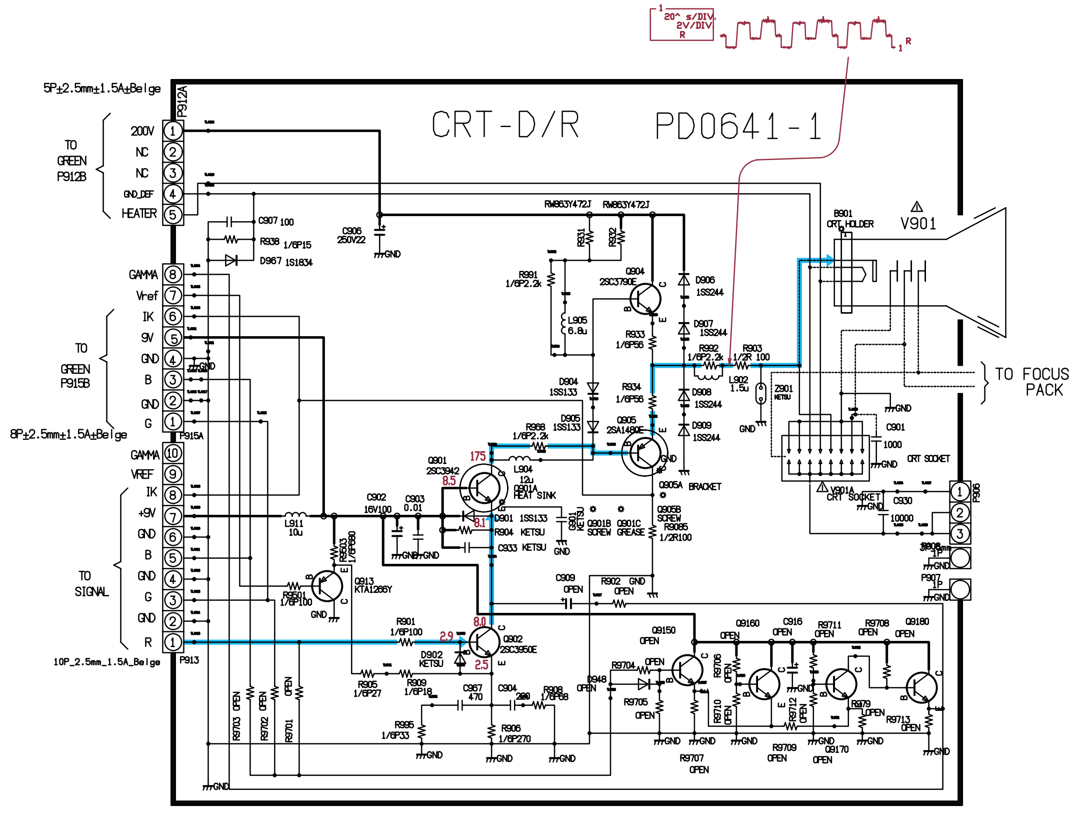


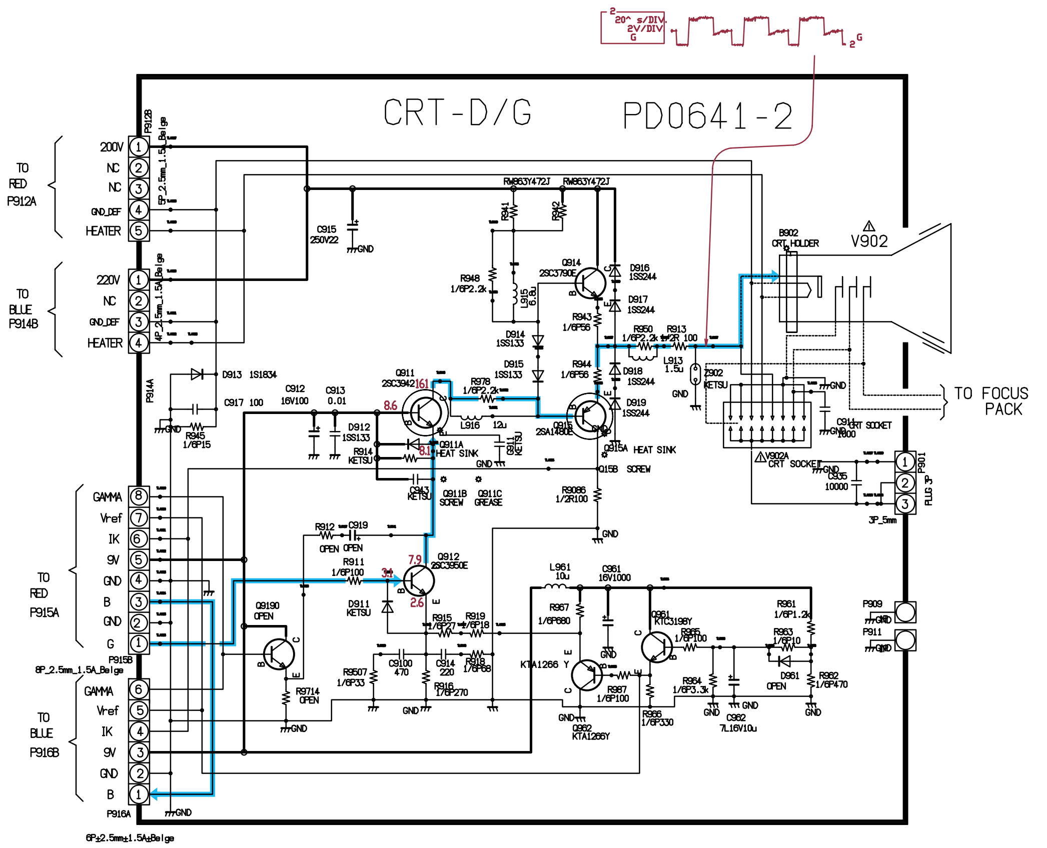
TAC-L10P-A3
PD01B
TO SIGNAL/CONVER
RIn
LIn
GND
I/O-3
Wout
I/O-2
5V-GND
SCL1
SDA1
12V-GND
RIn
LRIn-GND
LIn
open gard
Mode3
W-out
Mode2
5V-GND
SCL1
SDA1
JD02
JP
GND
12V
JD02: surface solder at China model
12V
(WIn)
GND
Rout
Lout
I/O-1
R-out
GND
L-out
open gard
Mode1
TAC-L6P-A3
PD02B
QD01
NJW1136D
23009142
New
A-Pro
100k
CD23 4.7u
RD19 100
SRS_R
RD18 1M
CD22 4.7u
INb
LF1
LF2
LF3
TONE-Hb
TONE-Lb
6V OUTb
AGC2
CVA
CVB
CVW
CTH
CTL
CSR
Vref
V+
CD21 M0.033
CD20 M0.047
CD19 M0.022
CD18 M1000p
CD17 M0.22
CD18: 2.2n → 1n
CD17: 100n → 220n
R-out
RD17 100
CD26 M0.01
RD16 100k
RD16: 47k → 100k 2001/12/25
CD16 4.7u
CD15 4.7u
CD14 4.7u
CD13 4.7u
CD12 4.7u
CD11 4.7u
CD10 4.7u
12V
CD08 16V220u
CD09 0.01
INa
SR-FIL
SS-FIL
TONE-Ha
TONE-La
OUTw
OUTa
AGC1
AUX0
AUX1
PORT0
PORT1
L:80h H:82h ADR
SDA
SCL
GND
CD01 4.7u
RD01 100
CD02 4.7u
SRS_L
RD02 1M
CD03 M0.1
CD04 M0.1
CD05 M1000p
2.2n → 1n
CD06 M0.22
RD03 100
100n → 220n
CD25 M0.01
RD04 100
CD24 M0.01
CD07 M0.33
RD05 100
3-state output
open collector output
RD06 4.7k
RD07 3.3k
NJR_H
SRS_L
RD08 open
RD09 100k
SRS3D_H
WOW_L
RD10 open
RD11 100k
RD20 open
RD21 3.3k
SDA1
RD12 100
RD13 100k
SCL1
RD14 220
RD15 100k
5V-GND
JP
GJD03

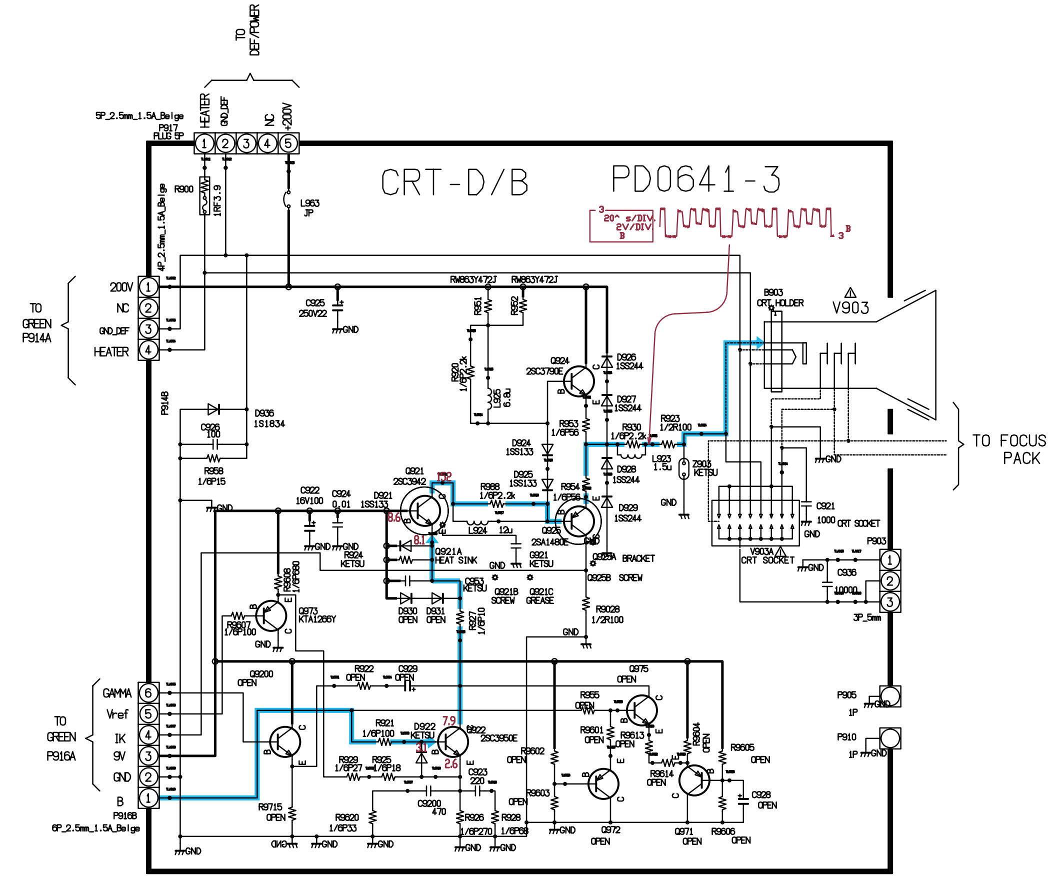
US_LCoS_57HL82	PD0645E	45047	57HL82
US_PJ_TNP_WOW	PD0645B	23787523	50HX82
US_DView_TNP_WOW	PD0645A	23787466	36HFX72
US_PJ_TNP_WOW_#1	FWD666	44806	50HX82_#1
US_DView_TVE	PDxxx6	2378xxx6	34HF81-
US_DView_TNP_WOW_#1	FWD666A	44814	36HFX72_#1
Asia_PJ_TSP_WOW	PDxxx4	2378xxx4	43VH9UE
Asia_PJ_DLTV_WOW	PD0645D	45131	43VH9UC
Asia_DView_TVE_WOW	PD0645C	44939	29VX9UH
Asia_DView_TVE_A-Pro	FWD666B	44930	29VH9UH
	unit	SN	model


WOW
QD41
NJM2700L
23000725
50k
GJD23
short
GJD47
open
GCD91
10u
GRD82
4.7k
RD81
22k
GJD50
open
GCD88
10u
LIn
LRIn-GND
RIn
GJD48 open
GRD80
4.7k
GCD90
10u
GJD49
GCD86
10u
RD79
22k
RD88
5.6k
RD83
10k
CD89
4.7u
RD84
open
47k,47k
QD81
RN2204
New PIMS
RD85
22k
46uA
7Ω
QD83 2SC2878-A
RD87
5.6k
RD86
22k
QD82
2SC2878-A
GJD04
open
GJD05
open
GJD06
open
CD84
M0.1
RD78
1.2k
CD83
M0.1
RD77
47k
CD82
M0.1
RD76
1.2k
RD75
47k
CD81
M0.1
FFL1
FFL2
FFL3
FFL4
FFR1
FFR2
FFR3
FFR4
TP3
Lout
Rout
Bass out
TP2
Mode1
Mode2
Mode3
Vref
Vref-In
Vcc
SRS_L
SRS_R
GND
GJD24
short
RD74 100
RD73 100
RD72 100
CD77
10u
CD76
10u
CD75
10u
300k
2V:H
0.7V:L
CD73
10u
CD72
open
CD74
16V220u
CD70
16V220u
CD71
0.01
12V
Vref
DD81
1SS133
DD82
1SS133
DD83
1SS133
Mode1
Mode2
Mode3
W-out
L-out
AUX0
AUX1
12V
C3
C4
FILout
FIL1
FIL2
FIL3
FIL4
FIL5
FIL6
FIL7
TP1
PCout
PCIn
C1
C2
SFIL1
SFIL2
SFIL3
SVOL2
SVOL1
GND
CD41
M0.1
CD42
M0.01
CD43
M0.1
CD44
M0.1
CD45
M0.18
RD41
12k
CD46
M0.18
1.8k
RD43
RD42
CD47 M0.33
RD44
12k
RD45
33k
RD46
2.7k
CD48
M0.33
RD47
100k
PC_SW
QD42
2SK372
RD48
15k
RD49
5.6k
RD60
2.2k
TruBass
PUNCH
Control
QD44
RN1204
CD49
1u
CD60
10u
CD61
M0.033
CD62
M0.01
CD63
M0.47
CD64
M0.33
CD65
220p
RD61 6.8k
RD62
SRS3D
WIDTH
Control
QD43
open
RD63 open
SVOL_SW
QD45
RN1204

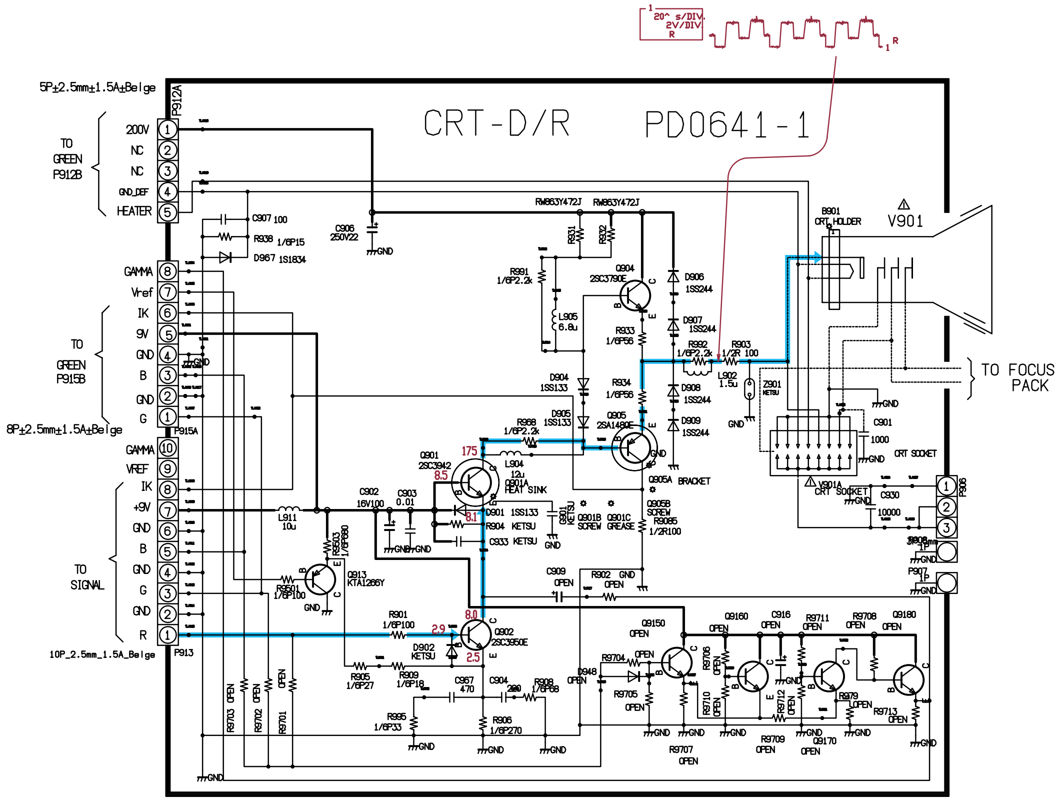
SRS-WOW
65HDX82 Series

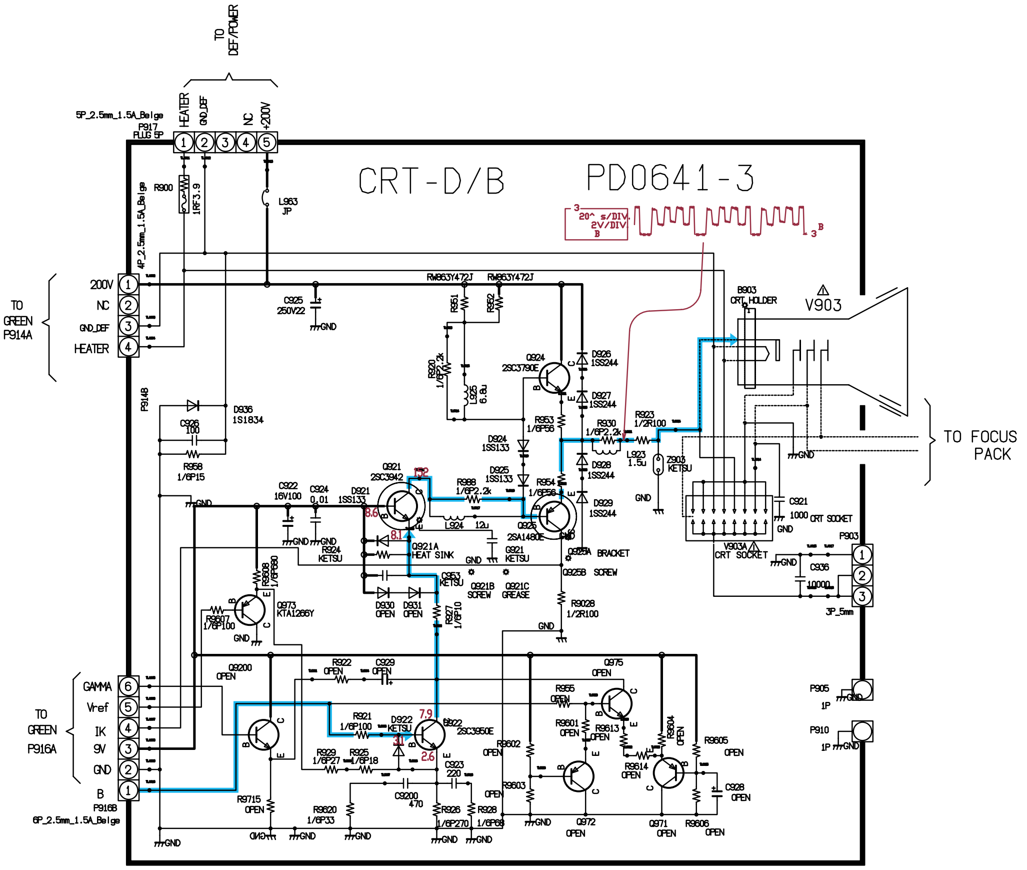

CRT-D/R
PD0641-1
V901
TO FOCUS PACK
TO GREEN P912B
TO GREEN P915B
TO SIGNAL
200V
NC
GND_DEF
HEATER
GAMMA
Vref
IK
9V
GND
B
G
R
Q901 2SC3942
Q902 2SC3950E
Q904 2SC3790E
Q905 2SA1480E
Q913 KTA1266Y
CRT SOCKET
CRT HOLDER
20^ s/DIV 2V/DIV

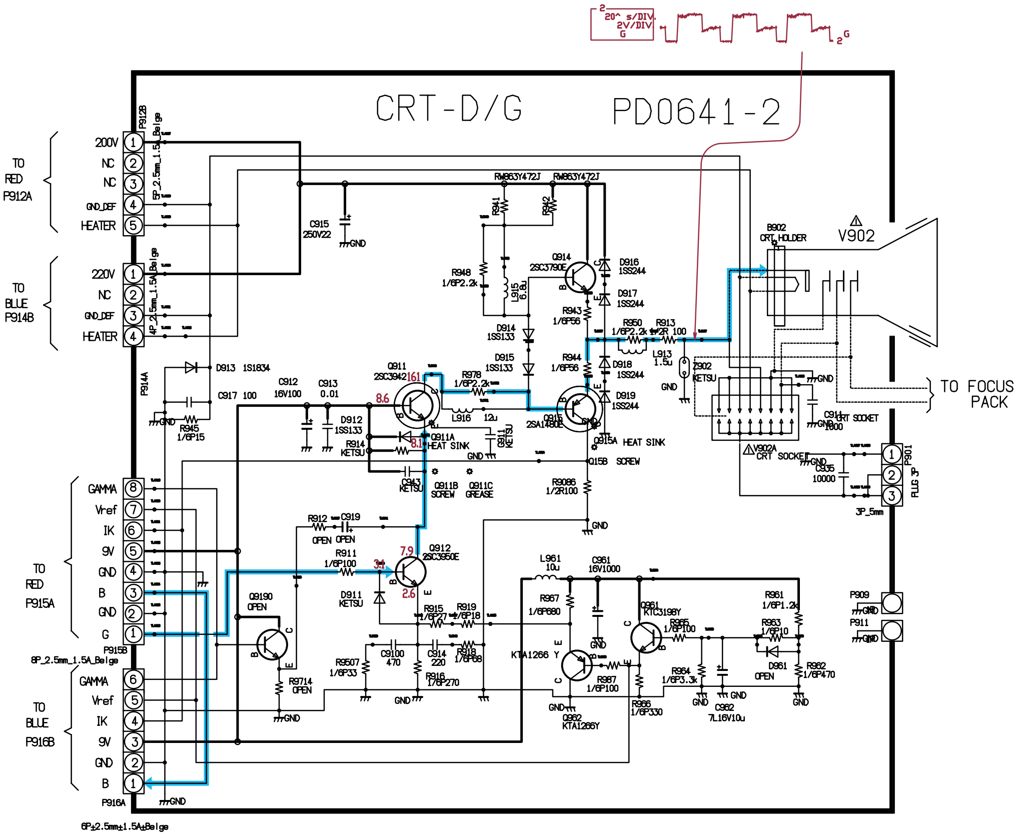

CRT-D/G
PD0641-2
V902
TO FOCUS PACK
TO RED P912A
TO BLUE P914B
TO RED P915A
TO BLUE P916B
200V
220V
NC
GND_DEF
HEATER
GAMMA
Vref
IK
9V
GND
B
G
Q911 2SC3942
Q912 2SC3950E
Q914 2SC3790E
Q915 2SA1480E
Q961 KTC3198Y
Q962 KTA1266Y
CRT SOCKET
CRT HOLDER
20^ s/DIV 2V/DIV


CRT-D/B
PD0641-3
V903
TO FOCUS PACK
TO DEF/POWER
TO GREEN P914A
TO GREEN P916A
HEATER
GND_DEF
NC
200V
GAMMA
Vref
IK
9V
GND
B
Q921 2SC3942
Q922 2SC3950E
Q924 2SC3790E
Q925 2SA1480E
Q973 KTA1266Y
CRT SOCKET
CRT HOLDER
20^ s/DIV 2V/DIV

CRTSVM(CRT-DRIVE)
65HDX82 series
[SHEET-1/2]

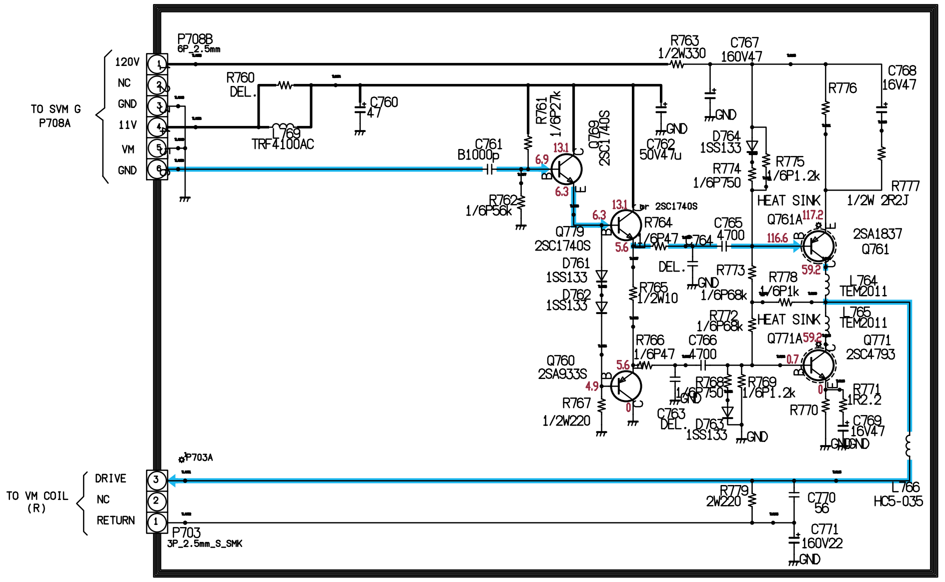

CRT-D/R
PD0641-1
1 20^ s/DIV. 2V/DIV R
5P±2.5mm±1.5A±Beige
P912A
200V
NC
NC
GND_DEF
HEATER
TO GREEN P912B
GAMMA
Vref
IK
9V
GND
B
GND
G
TO GREEN P915B
8P±2.5mm±1.5A±Beige
P915A
GAMMA
VREF
IK
+9V
GND
B
GND
G
GND
R
TO SIGNAL
P913
10P_2.5mm_1.5A_Beige
C907 100
R938 1/6P15
D967 1S1834
C906 250V22
RW863Y472J
R931
R932
R991 1/6P2.2k
L905 6.8u
Q904 2SC3790E
D906 1SS244
D907 1SS244
R933 1/6P56
R992 1/6P2.2k
R903 1/2R 100
L902 1.5u
Z901 KETSU
D904 1SS133
R934 1/6P56
D908 1SS244
D905 1SS133
R988 1/6P2.2k
Q905 2SA1480E
D909 1SS244
Q905A BRACKET
Q905B SCREW
R9085 1/2R100
Q901 2SC3942
175
8.5
L904 12u
Q901A HEAT SINK
8.1
D901 1SS133
R904 KETSU
C933 KETSU
G901 KETSU
Q901B SCREW
Q901C GREASE
C902 16V100
C903 0.01
L911 10u
R9603 1/6P680
Q913 KTA1266Y
R9501 1/6P100
C909 OPEN
R902 OPEN
R901 1/6P100
2.9
8.0
D902 KETSU
Q902 2SC3950E
2.5
R905 1/6P27
R909 1/6P18
C967 470
C904 220
R908 1/6P68
R995 1/6P33
R906 1/6P270
R9703 OPEN
R9702 OPEN
R9701 OPEN
D948 OPEN
R9704 OPEN
R9705 OPEN
Q9150 OPEN
R9706 OPEN
R9710 OPEN
Q9160 OPEN
C916 OPEN
R9712 OPEN
R9711 OPEN
R9708 OPEN
Q9180 OPEN
R979 OPEN
R9713 OPEN
R9709 OPEN
Q9170 OPEN
R9707 OPEN
B901 CRT HOLDER
V901
TO FOCUS PACK
C901 1000
CRT SOCKET
V901A CRT SOCKET
C930 10000
P906
P908 1P
P907 1P
GND


CRT-D/B
PD0641-3
TO DEF/POWER
HEATER
GND_DEF
NC
+200V
5P_2.5mm_1.5A_Beige
P917 PLUG 5P
R900 1RF3.9
L963 JP
4P_2.5mm_1.5A_Beige
3 20^ s/DIV. 2V/DIV B
200V
NC
GND_DEF
HEATER
TO GREEN P914A
P914B
C925 250V22
RW863Y472J
R951
R952
R920 1/6P2.2k
L925 6.8u
Q924 2SC3790E
D926 1SS244
D927 1SS244
R953 1/6P56
R930 1/6P2.2k
R923 1/2R100
L923 1.5u
Z903 KETSU
D936 1S1834
C926 100
R956 1/6P15
D924 1SS133
D925 1SS133
R988 1/6P2.2k
R954 1/6P56
D928 1SS244
D929 1SS244
Q921 2SC3942
172
8.6
8.1
C922 16V100
C924 0.01
D921 1SS133
L924 12u
Q925 2SA1480E
Q921A HEAT SINK
G921 KETSU
Q925A BRACKET
Q925B SCREW
R924 KETSU
C953 KETSU
Q921B SCREW
Q921C GREASE
D930 OPEN
D931 OPEN
R927 1/6P10
R9028 1/2R100
R9608 1/6P680
R9607 1/6P100
Q973 KTA1266Y
GAMMA
Vref
IK
9V
GND
B
TO GREEN P916A
P916B
6P_2.5mm_1.5A_Beige
Q9200 OPEN
R922 OPEN
C929 OPEN
R921 1/6P100
D922 KETSU
7.9
3.1
2.6
Q922 2SC3950E
R929 1/6P27
R925 1/6P18
C923 220
C9200 470
R9715 OPEN
R9820 1/6P33
R926 1/6P270
R928 1/6P68
R9602 OPEN
R9603 OPEN
Q975 OPEN
R955 OPEN
R9601 OPEN
R9613 OPEN
R9604 OPEN
R9605 OPEN
R9614 OPEN
Q972 OPEN
Q971 OPEN
R9606 OPEN
C928 OPEN
B903 CRT HOLDER
V903
TO FOCUS PACK
C921 1000
CRT SOCKET
V903A CRT SOCKET
P903
C936 10000
3P_5mm
P905 1P
P910 1P
GND

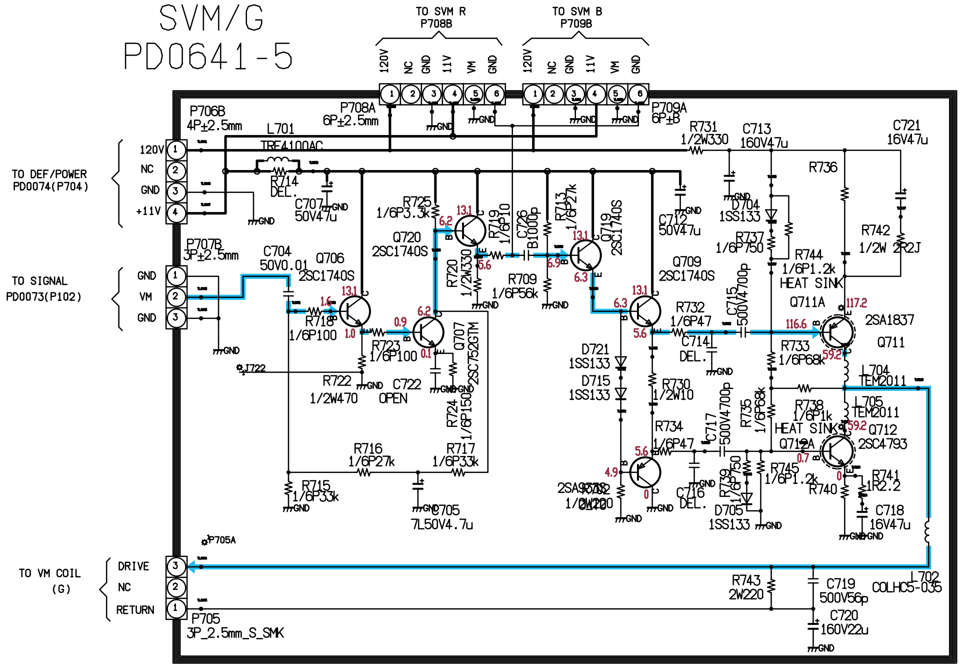

20^ s/DIV
2V/DIV
G
2G
CRT-D/G
PD0641-2
TO RED P912A
200V
NC
NC
GND_DEF
HEATER
P912B
6P_2.5mm_1.5A_Beige
TO BLUE P914B
220V
NC
GND_DEF
HEATER
4P_2.5mm_1.5A_Beige
P914A
D913 1S1834
C917 100
R945 1/6P15
C912 16V100
C913 0.01
C915 250V22
RW863Y472J
RW863Y472J
R941
R942
R948 1/6P2.2k
L915 6.8u
Q914 2SC3790E
D916 1SS244
D917 1SS244
R943 1/6P56
D914 1SS133
D915 1SS133
Q911 2SC3942
R978 1/6P2.2k
L916 12u
R944 1/6P56
D918 1SS244
D919 1SS244
Q916 2SA1480E
R950 1/6P2.2k
L913 1.5u
R913 1/2R 100
Z902 KETSU
B902 CRT HOLDER
V902
TO FOCUS PACK
C911 1000
CRT SOCKET
V902A CRT SOCKET
C935 10000
P901 PLUG 3P
3P_5mm
D912 1SS133
R914 KETSU
Q911A HEAT SINK
C911 KETSU
Q915A HEAT SINK
Q15B SCREW
C943 KETSU
Q911B SCREW
Q911C GREASE
R9086 1/2R100
161
8.6
8.1
TO RED P915A
GAMMA
Vref
IK
9V
GND
B
GND
G
P915B
8P_2.5mm_1.5A_Beige
R912 OPEN
C919 OPEN
R911 1/6P100
3.1
7.9
2.6
Q912 2SC3950E
D911 KETSU
Q9190 OPEN
R9714 OPEN
R915 1/6P27
R919 1/6P18
R918 1/6P68
C9100 470
C914 220
R9507 1/6P33
R916 1/6P270
L961 10u
C961 16V1000
R967 1/6P680
Q961 KTC3198Y
R965 1/6P100
KTA1266 Y
Q962 KTA1266Y
R987 1/6P100
R964 1/6P3.3k
R966 1/6P330
C962 7L16V10u
R961 1/6P1.2k
R963 1/6P10
D961 OPEN
R962 1/6P470
P909
P911
TO BLUE P916B
P916A
6P_2.5mm_1.5A_Beige
GND

CRTSVM(CRT-DRIVE)
65HDX82 series
[SHEET-1/2]

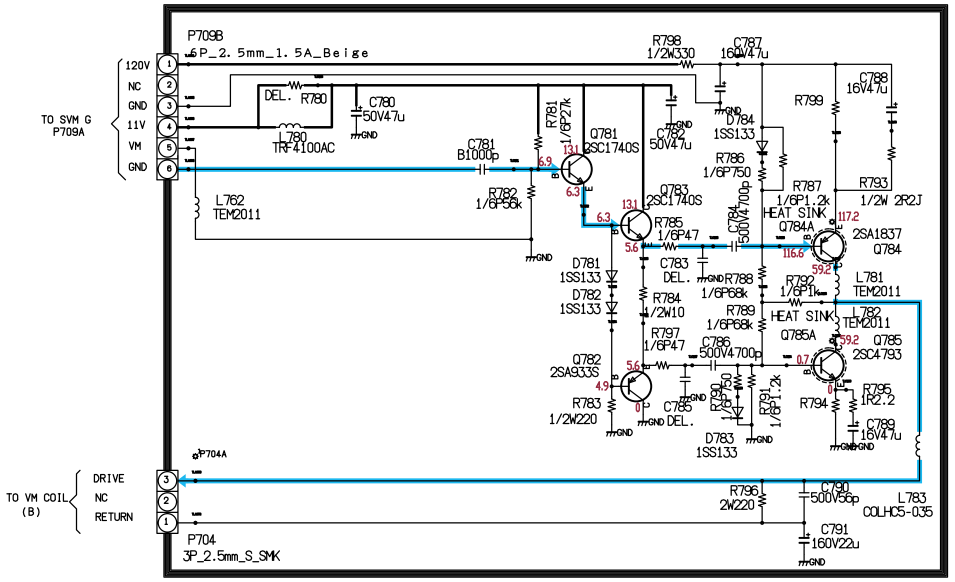
SVM/R
PD0641-4


TO SVM G P708A
120V
NC
GND
11V
VM
GND
P708B 6P_2.5mm
R760 DEL.
C760 47
L769 TRF4100AC
C761 B1000p
R761 1/6P27k
Q769 2SC1740S
R762 1/6P56k
R763 1/2W330
C767 160V47
C762 50V47u
D764 1SS133
R774 1/6P750
R775 1/6P1.2k
R776
C768 16V47
R777 1/2W 2R2J
Q779 2SC1740S
R764 1/6P47
C765 4700
HEAT SINK Q761A
2SA1837 Q761
D761 1SS133
D762 1SS133
R765 1/2W10
R773 1/6P68k
R778 1/6P1k
L764 TEM2011
L765 TEM2011
R772 1/6P68k
HEAT SINK Q771A
Q771 2SC4793
Q760 2SA933S
R766 1/6P47
C766 4700
R767 1/2W220
R768 1/6P750
R769 1/6P1.2k
C763 DEL.
D763 1SS133
R770
R771 1R2.2
C769 16V47
TO VM COIL (R)
DRIVE
NC
RETURN
P703A
P703 3P_2.5mm_S_SMK
R779 2W220
C770 56
C771 160V22
L766 HC5-035
GND

SVM/G
PD0641-5

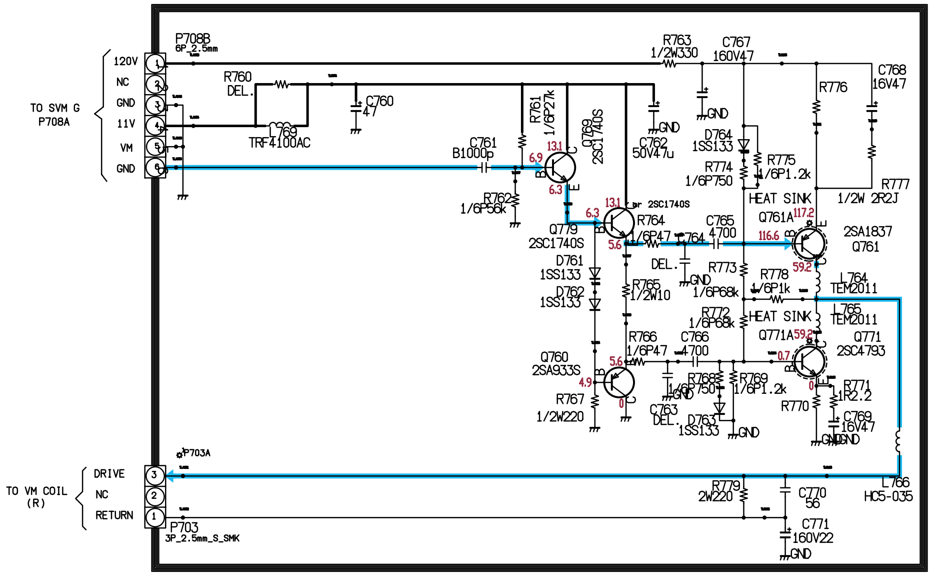

TO SVM R P708B
TO SVM B P709B
120V
NC
GND
11V
VM
GND
P706B 4P±2.5mm
L701 TRF4100AC
P708A 6P±2.5mm
P709A 6P±8
TO DEF/POWER PD0074(P704)
120V
NC
GND
+11V
R714 DEL.
C707 50V47u
R725 1/6P3.3k
Q720 2SC1740S
R719 1/2W10
C726 B1000p
R713 1/6P27k
Q719 2SC1740S
R731 1/2W330
C713 160V47u
C721 16V47u
R736
C712 50V47u
D704 1SS133
R737 1/6P750
R744 1/6P1.2k
R742 1/2W 2R2J
TO SIGNAL PD0073(P102)
GND
VM
GND
P707B 3P±2.5mm
C704 50V0.01
Q706 2SC1740S
R718 1/6P100
R723 1/6P100
Q707 2SC752GTM
R720 1/2W330
R709 1/6P56k
Q709 2SC1740S
R732 1/6P47
C715 500V4700p
HEAT SINK Q711A
2SA1837 Q711
C714 DEL.
R733 1/6P68k
L704 TEM2011
L705 TEM2011
D721 1SS133
D715 1SS133
R730 1/2W10
R722 1/2W470
C722 OPEN
R734 1/6P47
C717 500V4700p
R735 1/6P68k
R738 1/6P1k
HEAT SINK Q712A
Q712 2SC4793
R716 1/6P27k
R717 1/6P33k
R724 1/6P150k
R715 1/6P33k
D705 7L50V4.7u
2SA933S
1/2W220
C716 DEL.
D705 1SS133
R745 1/6P1.2k
R740
R741 1R2.2
C718 16V47u
P705A
TO VM COIL (G)
DRIVE
NC
RETURN
P705 3P_2.5mm_S_SMK
R743 2W220
C719 500V56p
C720 160V22u
L702 COLHC5-035
GND

SVM/B
PD0641-6


TO SVM G P709A
120V
NC
GND
11V
VM
GND
P709B 6P_2.5mm_1.5A_Beige
DEL. R780
C780 50V47u
L780 TRF4100AC
C781 B1000p
R782 1/6P56k
L762 TEM2011
R781 1/6P27k
Q781 2SC1740S
R798 1/2W330
C787 160V47u
C782 50V47u
D784 1SS133
R786 1/6P750
R799
C788 16V47u
R793 1/2W 2R2J
R787 1/6P1.2k
HEAT SINK Q784A
2SA1837 Q784
Q783 2SC1740S
R785 1/6P47
C784 500V4700p
D781 1SS133
D782 1SS133
C783 DEL.
R788 1/6P68k
R784 1/2W10
R792 1/6P1k
L781 TEM2011
L782 TEM2011
R789 1/6P68k
HEAT SINK Q785A
Q785 2SC4793
Q782 2SA933S
R797 1/6P47
C786 500V4700p
R783 1/2W220
C785 DEL.
D783 1SS133
R794
R795 1R2.2
C789 16V47u
P704A
TO VM COIL (B)
DRIVE
NC
RETURN
P704 3P_2.5mm_S_SMK
R796 2W220
C790 500V56p
C791 160V22u
L783 COLHC5-035
GND

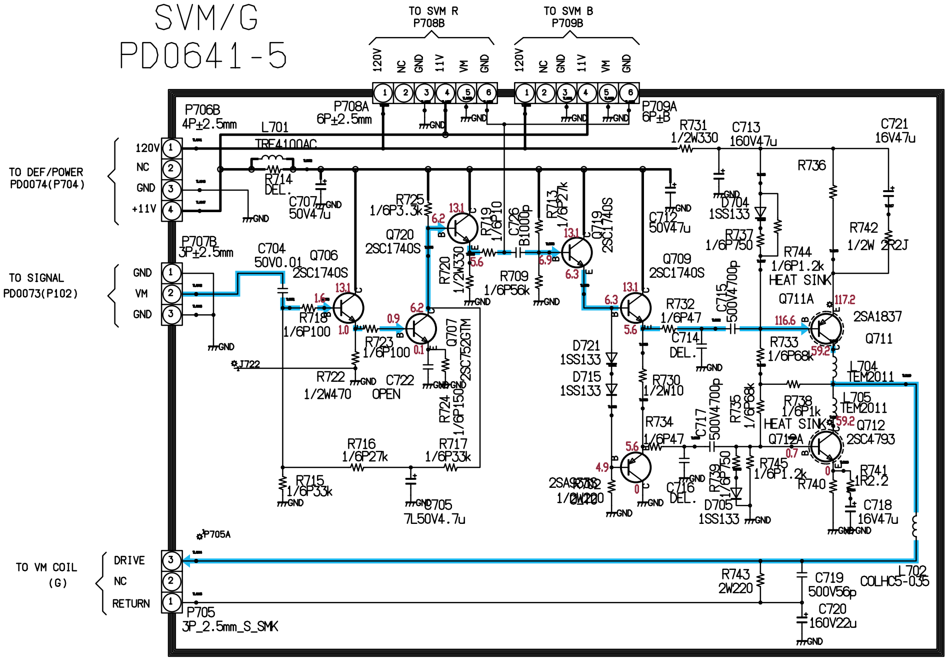
CRTSVM(SVM)
65HDX82 series
[SHEET-2/2]

SVM/R
PD0641-4



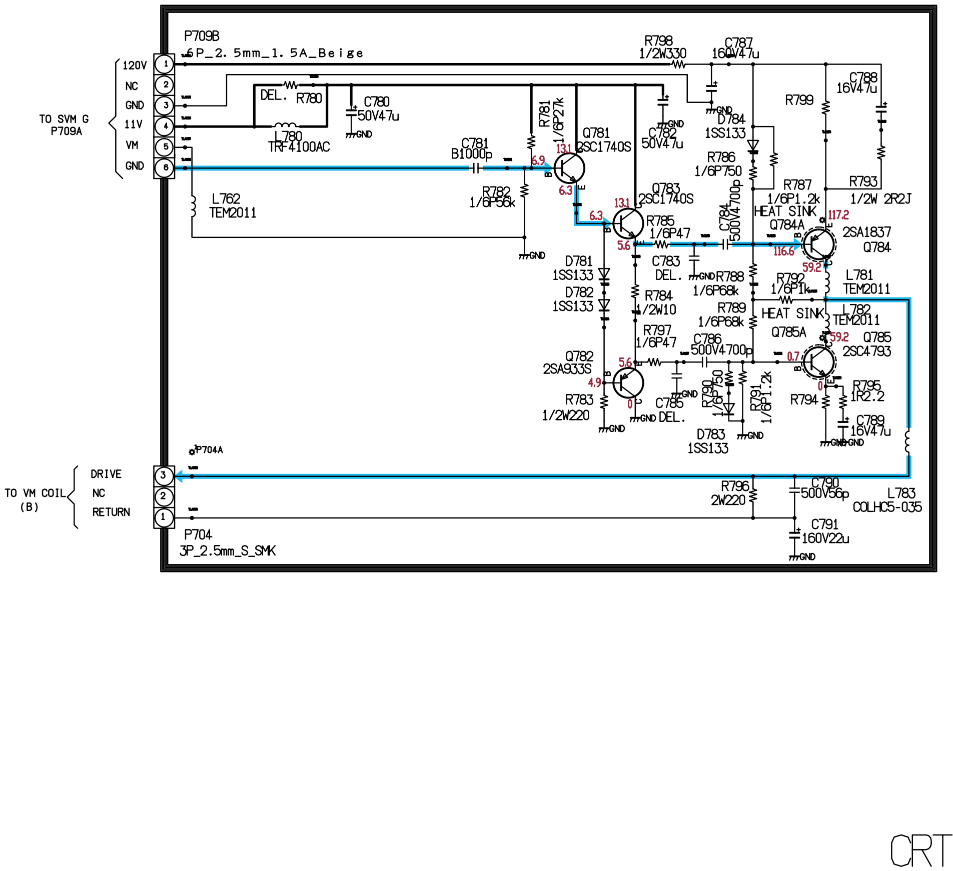
P708B
6P_2.5mm
120V
NC
GND
11V
VM
GND
TO SVM G
P708A
R760
DEL.
L769
TRF4100AC
C760
47
R761
1/6P27k
Q769
2SC1740S
C761
B1000p
R762
1/6P56k
C762
50V47u
R763
1/2W330
C767
160V47
C768
16V47
R776
R777
1/2W 2R2J
D764
1SS133
R775
1/6P1.2k
R774
1/6P750
HEAT SINK
Q761A
2SA1837
Q761
Q779
2SC1740S
R764
1/6P47
C765
4700
L764
DEL.
D761
1SS133
D762
1SS133
R765
1/2W10
R773
1/6P68k
R778
1/6P1k
L764
TEM2011
L765
TEM2011
R772
1/6P68k
HEAT SINK
Q771A
Q771
2SC4793
Q760
2SA933S
R766
1/6P47
C766
4700
R768
1/6P750
R769
1/6P1.2k
R771
1R2.2
R770
C769
16V47
R767
1/2W220
C763
DEL.
D763
1SS133
P703A
TO VM COIL (R)
DRIVE
NC
RETURN
P703
3P_2.5mm_S_SMK
R779
2W220
C770
56
L766
HC5-035
C771
160V22
GND
13.1
6.9
6.3
13.1
6.3
5.6
117.2
116.6
59.2
59.2
0.7
0
5.6
4.9
0

SVM/G
PD0641-5

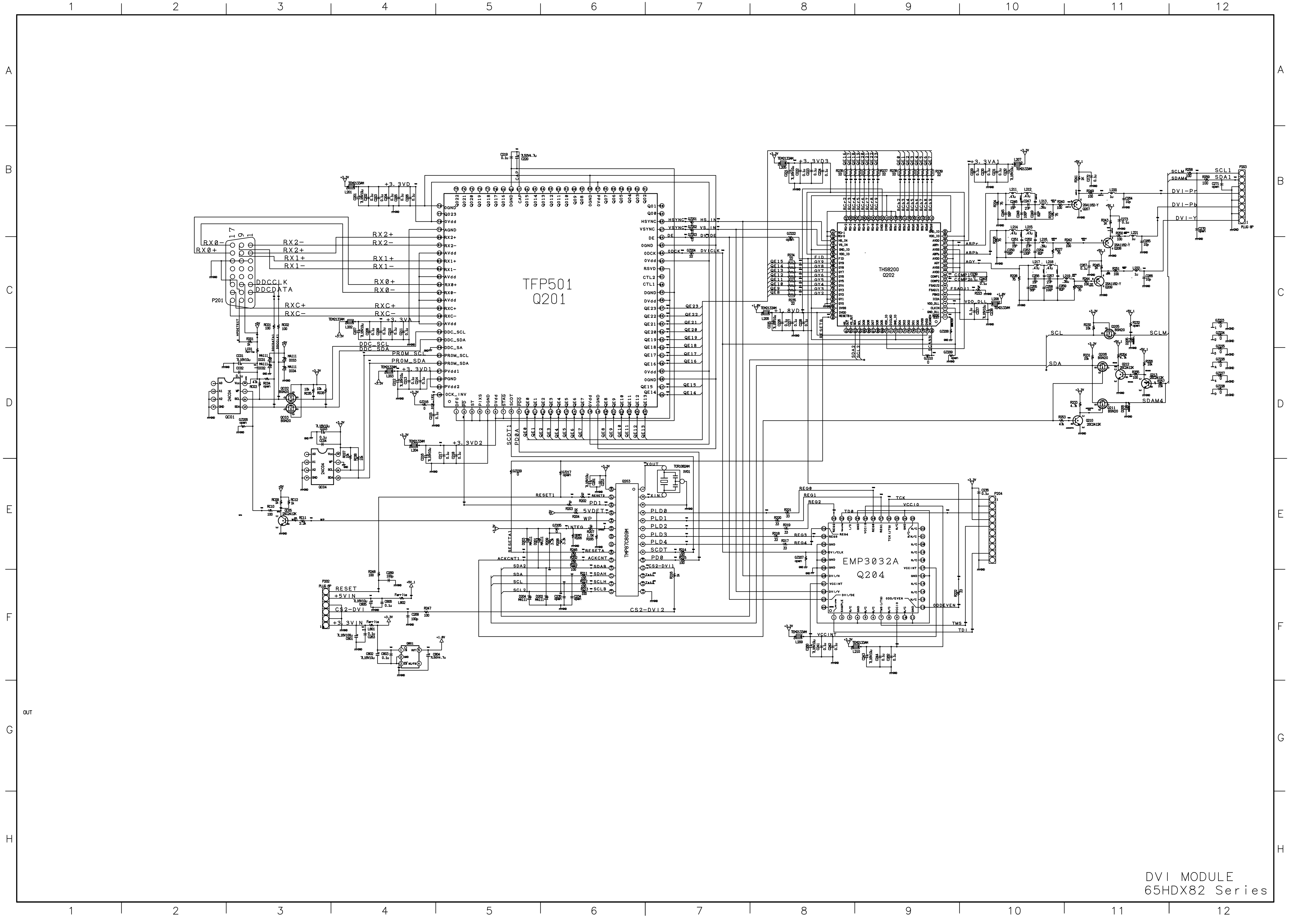


TO SVM R
P708B
TO SVM B
P709B
120V
NC
GND
11V
VM
GND
P706B
4P±2.5mm
P708A
6P±2.5mm
P709A
6P±B
TO DEF/POWER
PD0074(P704)
120V
NC
GND
+11V
L701
TRF4100AC
R714
DEL.
C707
50V47u
R731
1/2W330
C713
160V47u
C721
16V47u
R736
R742
1/2W 2R2J
R725
1/6P3.3k
R719
1/6P10
C726
B1000p
R713
1/6P27k
Q719
2SC1740S
C712
50V47u
D704
1SS133
R737
1/6P750
R744
1/6P1.2k
HEAT SINK
Q711A
2SA1837
Q711
P707B
3P±2.5mm
TO SIGNAL
PD0073(P102)
GND
VM
GND
C704
50V0.01
Q706
2SC1740S
Q720
2SC1740S
R720
1/2W330
R709
1/6P56k
Q709
2SC1740S
R732
1/6P47
C715
500V4700p
R718
1/6P100
R723
1/6P100
Q707
2SC752GTM
C714
DEL.
R733
1/6P68k
L704
TEM2011
J722
R722
1/2W470
C722
OPEN
D721
1SS133
D715
1SS133
R730
1/2W10
R724
1/6P150
C717
500V4700p
R735
1/6P68k
R738
1/6P1k
L705
TEM2011
HEAT SINK
Q712A
Q712
2SC4793
R716
1/6P27k
R717
1/6P33k
R734
1/6P47
R715
1/6P33k
C705
7L50V4.7u
2SA933S
R739
1/6P750
R745
1/6P1.2k
R741
1R2.2
R740
C716
DEL.
D705
1SS133
C718
16V47u
R729
1/2W220
P705A
TO VM COIL (G)
DRIVE
NC
RETURN
P705
3P_2.5mm_S_SMK
R743
2W220
C719
500V56p
L702
COLHC5-035
C720
160V22u
GND
13.1
1.6
1.0
0.9
6.2
0.1
6.2
13.1
5.6
6.9
13.1
6.3
6.3
13.1
5.6
117.2
116.6
59.2
59.2
0.7
0
5.6
4.9
0

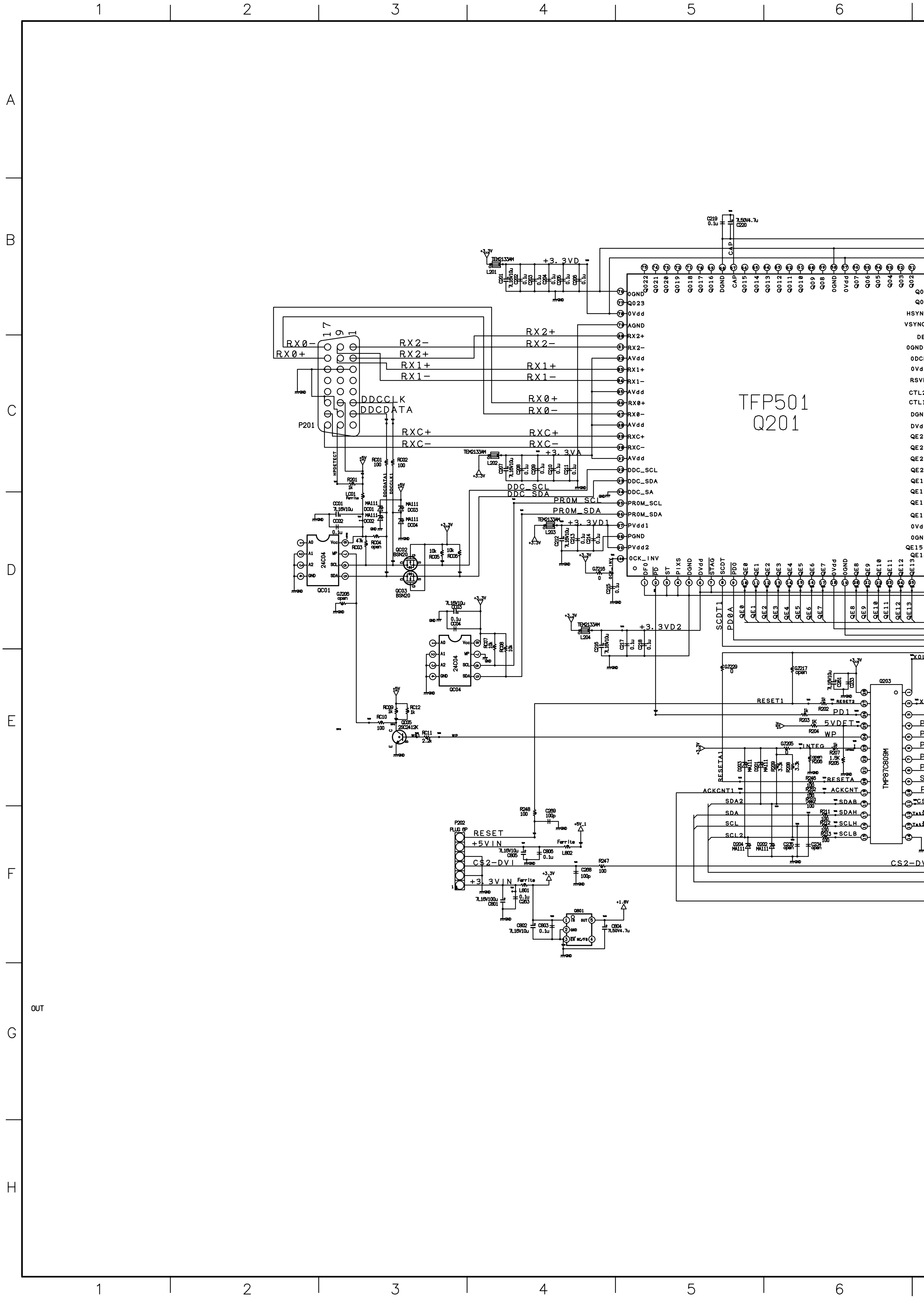
SVM/B
PD0641-6


P709B
6P_2.5mm_1.5A_Beige
120V
NC
GND
11V
VM
GND
1
2
3
4
5
6
TO SVM G
P709A
DEL.
R780
L780
TRF4100AC
C780
50V47u
GND
C781
B1000p
L762
TEM2011
R781
1/6P27k
R782
1/6P56k
Q781
2SC1740S
13.1
6.9
6.3
C782
50V47u
Q783
2SC1740S
13.1
6.3
5.6
R785
1/6P47
R798
1/2W330
C787
160V47u
D784
1SS133
R786
1/6P750
C784
500V4700p
R787
1/6P1.2k
HEAT SINK
Q784A
R799
C788
16V47u
R793
1/2W 2R2J
117.2
116.6
59.2
2SA1837
Q784
L781
TEM2011
D781
1SS133
D782
1SS133
C783
DEL.
R788
1/6P68k
R784
1/2W10
R792
1/6P1k
R789
1/6P68k
HEAT SINK
Q785A
L782
TEM2011
59.2
Q785
2SC4793
0.7
0
R797
1/6P47
C786
500V4700p
Q782
2SA933S
5.6
4.9
0
R783
1/2W220
C785
DEL.
R790
1/6P750
R791
1/6P1.2k
D783
1SS133
R794
R795
1R2.2
C789
16V47u
P704A
TO VM COIL
(B)
DRIVE
NC
RETURN
3
2
1
R796
2W220
C790
500V56p
L783
COLHC5-035
C791
160V22u
P704
3P_2.5mm_S_SMK

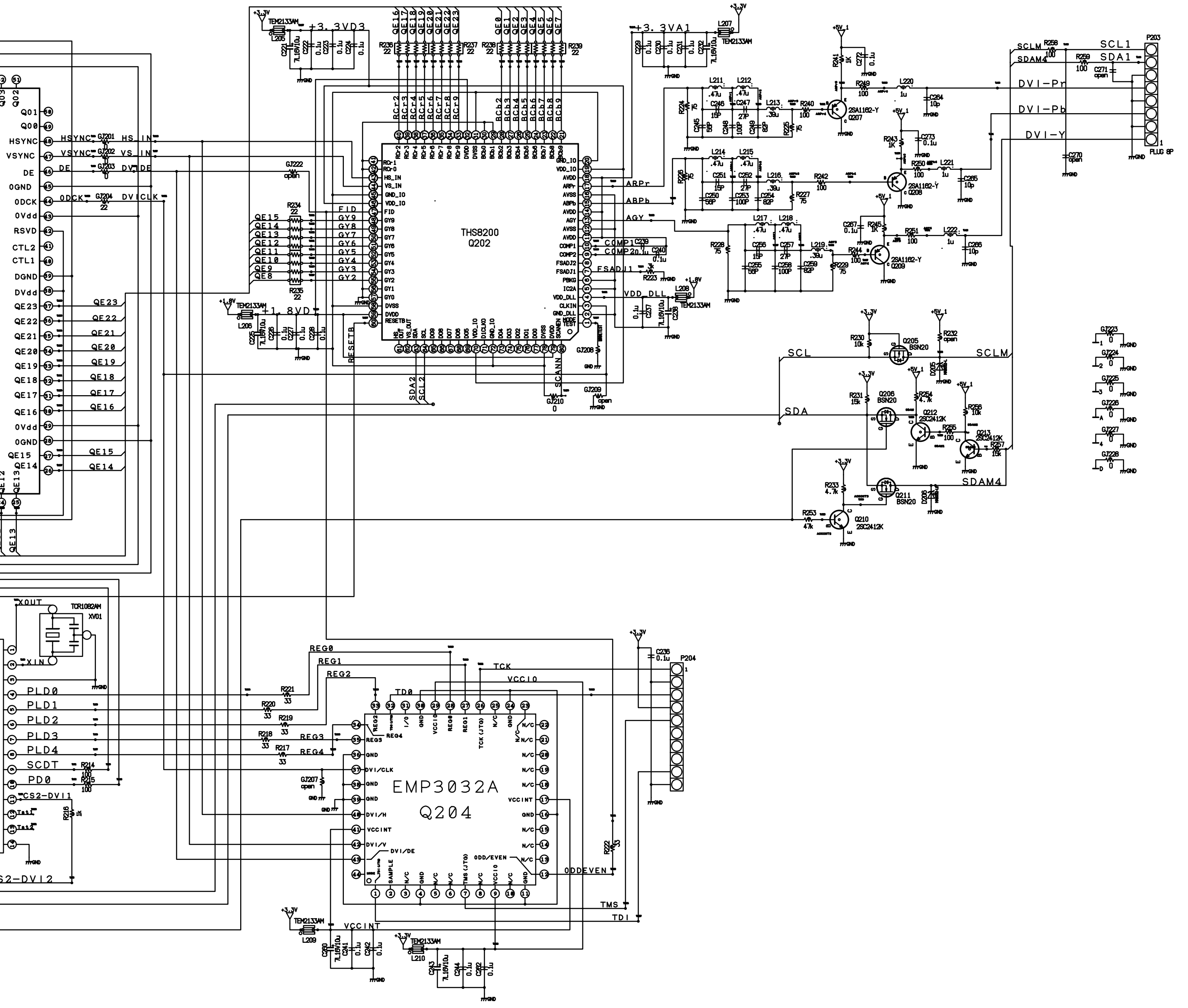
CRTSVM(SVM)
65HDX82 series
[SHEET-2/2]


TFP501
Q201
THS8200
Q202
EMP3032A
Q204
TMP87C809M
Q203
P201
P202
P203
P204
RX0-
RX0+
RX2-
RX2+
RX1+
RX1-
DDCCLK
DDCDATA
RXC+
RXC-
DDC_SCL
DDC_SDA
PROM_SCL
PROM_SDA
+3.3VD
+3.3VA
+3.3VD1
+3.3VD2
+3.3VD3
+3.3VA1
+1.8VD
HSYNC
VSYNC
HS_IN
VS_IN
DVIDE
DVICLK
SCDT1
PD0A
RESET1
PD1
5VDET
WP
INTEG
RESETA
ACKCNT
ACKCNT1
SDA2
SDA
SCL
SCL2
SDAH
SDAB
SCLH
SCLB
XOUT
XIN
PLD0
PLD1
PLD2
PLD3
PLD4
SCDT
PD0
CS2-DVI1
CS2-DVI2
REG0
REG1
REG2
REG3
REG4
TD0
TCK
VCCIO
VCCINT
TMS
TDI
ODDEVEN
RESET
+5VIN
CS2-DVI
+3.3VIN
SCLM
SDAM4
SCL1
SDA1
DVI-Pr
DVI-Pb
DVI-Y
ARPr
ABPb
AGY
COMP1
COMP2
FSADJ1
VDD_DLL
PLUG 8P
24C04
QC01
QC04
OUT
1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G
H

DVI MODULE
65HDX82 Series



TFP501
Q201
TMP87C809M
Q203
P201
RX0-
RX0+
RX2-
RX2+
RX1+
RX1-
DDCCLK
DDCDATA
RXC+
RXC-
17
9
1
+3.3VD
+3.3VA
+3.3VD1
+3.3VD2
DDC_SCL
DDC_SDA
PROM_SCL
PROM_SDA
OGND
Q023
OVdd
AGND
AVdd
RX0-
DDC_SA
PVdd1
PGND
PVdd2
OCK_INV
DFO
PD
ST
PIXS
DGND
DVdd
STAG
SCDT
PD0
QE0
QE1
QE2
QE3
QE4
QE5
QE6
QE7
QE8
QE9
QE10
QE11
QE12
QE13
Q022
Q021
Q020
Q019
Q018
Q017
Q016
CAP
Q015
Q014
Q013
Q012
Q011
Q010
Q09
Q08
Q07
Q06
Q05
Q04
Q03
Q02
HSYN
VSYNC
DE
ODCI
RSVI
CTL2
CTL1
DGN
DVd
QE15
24C04
QC01
QC04
QC02
QC03
BSN20
QC05
2SC2412K
HPDETECT
DDCDATA1
DDCCLK1
SCDT1
PD0A
RESET1
RESETA1
RESETA
PD1
5VDET
WP
INTEG
ACKCNT1
ACKCNT
SDA2
SDA
SCL
SCL2
SDAB
SDAH
SCLH
SCLB
P202
PLUG 6P
RESET
+5VIN
CS2-DVI
+3.3VIN
Q801
+1.8V
L201
L202
L203
L204
L801
L802
TEM2133AM
Ferrite
C219
0.1u
C220
7L50V4.7u
MA111
D203
D201
D202
D204
R201
R202
R203
R204
R205
R206
R207
R208
R209
R210
R211
R212
R213
R246
R247
R248
C268
C269
100p
GJ205
GJ206
GJ216
GJ217
GJ229
open
OUT
1
2
3
4
5
6
A
B
C
D
E
F
G
H


THS8200
Q202
EMP3032A
Q204
+3.3VD3
+3.3VA1
+1.8VD
VDD_DLL
TEM2133AM
L205
L206
L207
L208
L209
L210
HSYNC
VSYNC
DE
ODCK
HS_IN
VS_IN
DV_DE
DVICLK
FID
GY9
GY8
GY7
GY6
GY5
GY4
GY3
GY2
QE23
QE22
QE21
QE20
QE19
QE18
QE17
QE16
QE15
QE14
QE13
QE12
QE11
QE10
QE9
QE8
RESETB
SDA2
SCL2
SCANN
ARPr
ABPb
AGY
COMP1
COMP2
FSADJ1
DVI-Pr
DVI-Pb
DVI-Y
SCLM
SDAM4
SCL1
SDA1
P203
PLUG 8P
SCL
SDA
Q205
Q206
Q210
Q211
Q212
Q213
BSN20
2SC2412K
2SA1162-Y
Q207
Q208
Q209
REG0
REG1
REG2
REG3
REG4
TCK
TD0
VCCIO
VCCINT
ODDEVEN
TMS
TDI
P204
PLD0
PLD1
PLD2
PLD3
PLD4
SCDT
PD0
CS2-DVI1
CS2-DVI2
XOUT
XIN
TCR1082AM
XV01
DVI/CLK
DVI/H
DVI/V
DVI/DE
ODD/EVEN
SAMPLE
GND
7
8
9
10
11
12
A
B
C
D
E
F
G
H

DVI MODULE
65HDX82 Series